

A

Natural History OF THE PASSIONS.

By *WALTER CHARLTON, M.D.*

*Mibi crede, qui nihil agere videntur, ma-
jora agunt; humana divinaq; simul
tractant.* Seneca Epist. 8.

The Second Edition, Enlarged.

L O N D O N,

Printed for *R. Wellington*, at the *Dolphin and Crown*,
the West-end of *St. Paul's Church-yard*; and
E. Rumball, at the *Post-house, Covent-garden*, 1701.



John L.

1902-1903

Legislature 1901-1902

112



The Epistle Prefatory to a Person of Honour, Friend to the Author.

Περιστερας εις αετην ιν ζενμια Λυχη, exercetur ad virtutem in solitudine anima; was the saying of a *Bragman* or Indian Philosopher to *Alexander the Great*: and how memorable it is, you may perhaps collect from this diversion. For, the imperfect *Discourse* I herewith send to you, my dear *Friend*, concerning the **P A S S I O N S**, is the product of my late ten weeks *solitude* in the Country. Where being remote from my Library, and wanting conversation with Learned Men; I knew not how more innocently to shorten the winter evenings, than by spending them in revising some Philosophical papers of my own, wherein among other things, I had formerly, out of the best Authors, made certain *Collections* concerning the divine art of acquiring constant *Tranquility* of Mind, by *Wisdom* or the right use of Reason. And of this serious Diversion I then made choice, both because I well understood the best part of Human Science to be that which teacheth us how to moderate our *Affections* to the

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deceiptful and transitory things of this life, and so regulate our *Actions*, as to reap from them, whatever their Events may be, the happy fruit of internal *Acquiescence* and Satisfaction: and because my accumulated Misfortunes had at that time reduced me to a necessity of consulting that part of Philosophy, about the most effectual *Remedies* against *Discontent*.

In this state and resolution then, first I remembred, that Nature hath made Man subject to no other *real Evil*, but only *pain* of the *Body*; all *Grief* or *pain* of the *Mind*, though many times more sharp and intollerable, being created by our own false *Opinion*, that we stand in want of things that are in truth without the circle of ourselves, and therefore not absolutely necessary to our well-being.

Then I considered, that most commonly *false Opinions* are occasioned, and so exorbitant *Desires* suggested to us by our *Passions*; upon which all the *Good* and *Evil* incident to us in this life, seems to depend: as *Joy* and *Grief* are the two points in which all Human actions end. For, though it be undoubtedly true, that the *Reasonable Soul* hath her *intellectual Delights* and *Disquiets* apart, such as are proper to her simple and spiritual nature: yet is it no less true, that those other Delights and Disquiets that are common

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mon to her with the *Body*, depend intirely upon the *Affections*. Which when *regular*, that is, moderated and directed by *Reason*, are indeed of good use to the Soul, in that they serve to incite her to desire such objects which she well knows to be pleasant and beneficial to her, and to persist in that desire: but when *irregular*, by representing as really good, things that are so only in appearance, provoke her to erroneous *Desires*, and in pursuit of them, to *Actions* also repugnant to the dictates of right *Reason*, and consequently to peace and *tranquility* of Mind.

From these Cogitations it was not difficult for me to infer, that the whole art of attaining unto that internal serenity after which I was seeking, consisteth principally in *Directing our Desires aright*, that is, to things which we clearly and distinctly know to be really Good: and that the only way so to direct our Desires, is to employ our Understanding or Faculty of Discerning, which God hath to that end given us, strictly and attentively to *examine* and *consider* the *goodness* of things recommended to us by our *Passions*, before we determin our *Will* to affect and pursue them. For, most certain it is, that as our faculty of *Discerning*, that is, our *Intellect*, cannot naturally tend to *falsity*: so neither can our

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faculty of *Assenting*, that is our *Will*, be deceived, when it is determined only upon objects which we clearly and distinctly understand ; and where our *Will* is not misplaced, there can be no just cause of *Perturbation* of Mind.

Being soon convinced of this no less evident than important verity, in the next place I considered, that if our inordinate *Affections* be the bitter fountain from whence the greatest part of, if not all our *practical Errors*, and by consequence most of the *Evils* we suffer, flow ; and if as the diseases of the *Body*, so likewise those of the *Mind*, may be more easily cured, when their nature and causes are understood : then would it be requisite for me first to inquire as far as I should be able, into the *nature, causes, motions, &c.* of the *Passions*, before I proceeded further in my research after the most powerful *Remedies* against their *Excesses*.

To this inquiry therefore I diligently applied myself, both by reading and meditation ; by *Reading*, that I might recall into my memory what I had long before transcribed out of the books of such Authors who had written judiciously and laudably of the *Passions* : by *Meditation*, that I might examin the weight of what I read, by comparing it with what I daily observ-
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ed within the theatre of my own breast ; every Man living being naturally so sensible of the various Commotions hapning in various Passions, especially more violent ones, that some have held, the knowledge of their nature and causes may be without much of difficulty derived from thence alone, without any help from foreign observations. And while I proceeded in this course, I digested my Collections and private Sentiments into such an order or *Method* which seem'd to me most convenient, aswell to show their genuin succession, and mutual dependence, as to make the Antecedents support the Consequents, and both to illustrate each other reciprocally. I put them also into a dress of *Language* so plain and familiar, as may alone evince, my design was to write of this Argument, neither as an Orator, nor as a Moral Philosopher, but only as a *Natural* one conversant in *Pathology*, and that too more for his own private satisfaction, than the instruction of others. And thus have I succinctly acquainted you with the *Occasion*, *Subject*, *Scope* and *Stile* of the Treatise that accompanieth this Epistle. ¶

But this, *Noble Sir*, is not all whereof I ought to advertise you, before you come to open the Treatise itself. There remain yet *two or three* things more, which it imports

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ports me to offer to your notice, as Preparatives against prejudice.

One is, that if in the preliminary part of the Discourse, where it was necessary for me to investigate the *Subjectum Primum* of the Passions, I have declared my assent to their opinion, who hold, that in every individual Man, there are *two* distinct *Souls*, coexistent, conjoyned, and cooperating ; one, only *Rational*, by which he is made a Reasonable creature ; the other, *Sensitive*, by virtue whereof he participateth also of Life and Sense : I did so chiefly for these *two* Reasons.

First, it seem'd to me unintelligible, how an Agent incorporeal, but not infinite, such as the *Rational* Soul by her excellent faculties and proper acts appears to be, can act physically in and upon a gross and ponderous body, such as ours are, immediately, or without the meditation of a *third* thing ; which though corporeal too, may yet be of a substance so refined and subtil, as to approach somewhat nearer to the nature of a pure Spirit, than the body itself doth : and therefore for the more probable explication of the *Phenomena* of the Passions which are not raised in the Rational Soul, I found myself obliged to admit her to have a *Sensitive* one conjoyned with her, to receive her immediate suggestions, and to actuate

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ctuate the body according to her sovereign will and pleasure ; there being less of disparity betwixt the most thin and subtil bodies of Light and *Flame* (whereof many eminent Philosophers have conceived a *Sensitive* Soul to consist) and a substance purely Spiritual, than between a pure spirit and a gross, heavy body, as ours is.

Secondly it seem'd to me no less unconceivable, whence that dismal *τυχομαχία* or *intern War* which every Man too frequently feels within himself, and whereof even St. Paul himself so sadly complained, when (in Epist. ad Roman. cap. 3.) he cries out, *video aliam legem in membris meis repugnantem legi mentis meae* ; should arise, if not from a *Duumvirate* as it were of *Rulers* contending for superiority within us, and inclining us two contrary ways at once. For to conceive that one and the same *Simple* thing, such as the *Reasonable* Soul is rightly presumed to be, can be repugnant to itself, or at one and the same time be possessed with opposite affections ; is manifestly absurd. There are indeed, who to evade this absurdity, imagine it possible, that of one and the same *Rational*, *simple* Soul, there may be *two* distinct *Faculties* or powers opposite each to other, from whose clashings and contrary inclinations this civil War may proceed. But to oblige us to swallow

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low this palpable contradiction, these Men ought to have reconciled those two repugnant notions of *Simple* and *Compound* ; and to have told us, why in the same simple substance of *fire* there cannot likewise be two mutually repugnant faculties, *heat* and *cold*. In a *Mixed* body there may be, I confess, opposite faculties ; and therefore the like may be imagined also in the Rational Soul, if she be conceived to be of a mixed or compound nature : but that is against their own *supposition*, and destructive to the natural *immortality* of the Soul. What then can remain to cause this dire War daily observed within us, betwixt the allurements of our *Sense*, on one side, and the grave dictates of our *Mind*, on the other ; but two distinct Agents, the *Rational* Soul and the *Sensitive*, coexistent within us, and hotly contending about the conduct of our Will ?

But You, Sir, will perhaps tell me, there may *another*, and that a more probable cause be given of this hostility ; and that the searching wit of *Monsieur des Cartes* hath been so happy to discover what it is, *in libr. de Passion. part. 1. art. 47.* where he thus reasoneth. “ In no other thing (*saith he*) but in the repugnancy that is between the motions which the Body by its spirits, and those which the Soul by her

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“ her will, doat the same time endeavour
“ to excite in the *Glandula Pinealis* in the
“ brain, consist all the *Conflicts* which Men
“ commonly imagine betwixt the *inferior*
“ part of the Soul, which is named the
“ *Sensitive*, and the *Superior*, which is cal-
“ led the *Rational*, or betwixt the *appetites*
“ *natural* and the *will*. For, in us there
“ is only one Soul, which hath in her no
“ variety of parts: the same that is *Sensi-*
“ *tive*, is also *Rational*, and all the appe-
“ tites thereof are volitions. The *Error*
“ by which divers Persons as it were, that
“ are for the most part mutually contrary,
“ come to be imposed upon her; hath pro-
“ ceeded only from hence, that hitherto
“ her functions have not been sufficiently
“ distinguished from the functions of the
“ *Body*; to which alone is to be ascribed
“ all that can be observed in us to be re-
“ pugnant to our *reason*. So that here is
“ no other *Contrast*, but that when the
“ *Glandule* seated in the middle of the
“ brain, is impell'd on one part by the *Soul*,
“ and on the other by the *Spirits Animal*,
“ which are nothing but bodies, as I have
“ before declared: it often happens, that
“ those two impulses or impressions are
“ contrary each to other, and that the
“ stronger hindereth the effect of the wea-
“ ker. Now there may be distinguished

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“ two kinds of motions excited in the
“ Glandule by the spirits: *some* represent
“ to the Soul objects that move the Senses,
“ or impressions found in the brain, and
“ use no force upon the *will*; *others* use
“ force, namely, those that make the *Passi-*
“ *ons*, or the motions of the body that ac-
“ company them. And as for the *first*;
“ though they often hinder the actions of
“ the Soul, or be hindered by them; yet
“ because they are not directly contrary,
“ there is no strife or contention observ-
“ ed in them: but only betwixt the *last*
“ and the *Wills* that are repugnant to them;
“ for *Example*, betwixt the endeavour by
“ which the spirits impell the Glandule to
“ induce upon the Soul a *desire* of some
“ one thing, and that by which the Soul
“ repells the same Glandule by her *will* to
“ avoid it. And this chiefly demonstra-
“ teth this strife, that since the will hath
“ not power (as hath been already shewn)
“ to excite Passions *directly*, the Soul is
“ therefore compell'd to use art, and to ap-
“ ply herself to the consideration of vari-
“ ous things successively. Whence if it
“ happen that any one of those various
“ things hath the force of changing for a
“ moment the course of the spirits; it may
“ so fall out, that the next thing that oc-
“ curs to be considered, may want the like
“ force,

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“ force, and the spirits may resume their
“ former course, because the precedent dis-
“ position in the nerves, in the heart, and
“ in the blood, hath not been changed :
“ whereby it comes to pass, that the Soul
“ almost in the same moment feels herself
“ impell'd to *desire* and *decline* the same
“ thing. And this hath given Men occa-
“ sion of imagining in the Soul two pow-
“ ers mutually repugnant. But yet there
“ may be conceiv'd a certain *Conflict* in this,
“ that oftentimes the same cause that exci-
“ teth some Passion in the Soul, exciteth
“ also in the Body some certain motions,
“ whereunto the Soul contributeth no-
“ thing at all, and which she stops, or en-
“ deavours to stop, so soon as she observes
“ them : as is manifest from experience,
“ when that which exciteth *Fear*, causeth
“ also the spirits to flow into the Muscles
“ that serve to move the leggs to flight ;
“ and occasioneth the will of exercising
“ *Courage* to stop them.

To this Objection therefore I answer (1.) that had this excellent Man, *Monsieur des Cartes* been but half as conversant in Anatomy, as he seems to have been in Geometry, doubtless he would never have lodged ~~a~~ noble a guest as the Rational Soul, in so in-
commodious a closet of the brain, as the *Glandula Pinalis* is; the use whereof hath been demonstrated to be no other but to receive

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ceive into its spongy cavities, from two little nerves, a certain serous Excrement, and to exonerate the same again into its veiri, which nature hath therefore made much larger than the artery that accompanieth it; and which having no Communication with the external organs of the Senses, cannot with any colour of reason be thought the part of the brain, wherein the Soul exerciseth her principal faculties of *judging* and *commanding*. (2.) This *Glandule* which he supposeth to be so easily flexible and yielding to contrary impulses, is not loosely suspended, but *fixed*: so that whoever hath once beheld the solid basis, strong consistence, and firm connexion thereof, will hardly ever be brought to allow it capable of any impulse to either side; though by the greatest Hurricano of Spirits imaginable, much less by every light motion of them excited by external objects affecting the senses. (3.) Though we should grant this Gland to be both the Throne of the Soul, and most easily flexible every way: yet hath *Des Cartes* left it still unconceivable, how an Immaterial Agent, not infinite, comes to move by impulse a solid body, without the mediation of a third thing that is less disparil or disproportionate to both. Now these things duely considered, you will (I presume) no longer imagine

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the Conflicts, or Combats that frequently happen within us betwixt the Rational and Sensitive Appetites, to consist only in the repugnancy of the impulses of this little Glandule by the Spirits on one side, to those of the same Glandule by the Soul on the other. Besides, that the Soul hath power to excite Corporeal Passions *directly*, that is, without considering successively various things; is manifest from her Sovereignty over the body, which in all voluntary actions is absolute and uncontrollable; and in the very instance of Fear alledged by our Author, where she determineth her *Will to Courage*, to oppose the danger suggested, *instantly*, and without running through a long series of various considerations, for which she then hath not time sufficient. However, evident enough it is, that this conceit of repugnant impulses of this *Gland* in the brain, is so far from giving light to the reason of the Conflict here considered, that it rather augmenteth the obscurity thereof, by implying two contrary Appetites or Wills in one and the same Soul, at one and the same time: Whereas the supposition of two Souls mutually opposing each others Appetites, doth render the same intelligible.

Against this opinion of a *Duality of Souls* in one Man, some have (I well know)

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with not a little confidence urged the Sentence of some of the *Fathers*, yea and of whole *Councils*, condemning all who should assert it ; and more particularly *Concil. 8. ad. 10. Vien. in Clem. vii. & Lateran. 3. sess. 8.*

But this, Sir, is *Brutum fulmen*, dangerous to none, terrible only to the Unlearned. For, to any understanding Reader of those *decrees*, it is clearly manifest, that the edge of them is turned against first the *Doctrin* of the *Manichees* holding two human Souls in every individual Man ; one polluted with the stain of vices, and derived from an evil principle ; the other incontaminate, and proceeding immediately from God, yea more, a particle of the Divine Essence itself ; then the *Platonics* also, and *Averrhoists*, teaching that the Rational Soul is not man's *forma informans*, but part of the *Anima Mundi* or Universal Soul : but not against the asserters of two Souls coexistent, one simply Reasonable, the other merely Sensitive, in every single Person, in that innocent sense I deliver it. And thus have the same Decrees been judiciously interpreted by the religious Philosophers of the College of *Conimbra* ; who, as of all Men they have discoursed most acutely and profoundly of this Argument ; so have they with greatest moderation treated the Defendants

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fendents of this opinion by me here embraced. For (*in 1. de Generat. cap. 4. quæst. 21. art. 2.*) though they expressly avow their adherence rather to the common belief of the singularity of the Human Soul, as most consentaneous to the sense of the Church: yet they declare, also, that the contrary opinion ought not to be censured as heretical or erroneous.

Why therefore should I fear to espouse it? especially if to the reasons here urged, and others no less considerable alledged by me in the third Section of the Treatise to which this Epistle invites you, be added for confirmation, that so celebrated text of St. Paul (*ad Thessal. 1. cap. 5. vers. 23.*) τὸ ὄλοκληρον ὑμῶν τὸ πνεῦμα, καὶ ἡ φυχὴ, καὶ τὸ σῶμα; *integer vester spiritus, & anima, & corpus, &c.* Where our most learned Dr. Hammond of pious memory (in his *Annotations* on the place) conceives the Apostle to divide the whole Man into three constituent parts, viz. the *Body*, which comprehendeth the flesh and members; the *Vital Soul*, which being also Animal or Sensitive, is common likewise to Brutes; and the *Spirit*, by which is denoted the Reasonable Soul originally created by God, infused into the body, and from thence after death to return to God; and this genuin exposition of his he con-



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firms by agreeing testimonies both of Ethnic Philosophers, and some ancient Fathers.

To these give me leave to superadd (*ex abundanti*) the concordant suffrages of three eminent Philosophers of our own age; namely, the *Lord Chancellor Bacon*, who (in his 4 *Book of the Advancement of Learning*, chap. 3.) gravely discoursing of the parts of Knowledge concerning the Mind or Soul of Man, divideth it into that which declares the nature of the Reasonable Soul, which is a thing Divine; and that which treateth of the Unreasonable Soul, which is common to us with Beasts: and then proceeds to affirm at large, that the former hath its original from the inspiration or breath of God; the latter, from the matrices of the Elements: the *immortal Gassendus*, *de Physiologia Epicuri*, cap. *de Animæ sede*, *Passionibus Animi*, &c. and the now flourishing *Dr. Willis*, *in libr. de Anima Brutorum*, cap. 7. whose words I forbear to transcribe, out of design to increase your satisfaction, by obliging you to read them at your leisure in the places cited. Now if solid Reasons, Authority Divine, and the judgment of many sublime Wits and profound Philosophers, aswell Ancient as Modern, be of any weight to recommend this neither heretical, nor improbable opinion to me; certainly I need not blush to incline thereunto.

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thereunto. Notwithstanding this, I recount the same *tanquam in Hypothesi*, only as a *supposition* convenient to solve the *Phenomena* of the Passions; not as an article of my faith: nor had I so importunely insisted thus long upon arguments to justify my approbation thereof, in this Letter; had I not, through want of Books, omitted to do it where I ought, in the III. *Section* of the Discourse itself. ¶

The SECOND advertisement I owe you, *Friend*, is this, that the greatest part of what is delivered in the same Discourse, concerning the nature, substance, faculties, Knowledge, &c. of a Sensitive Soul, hath been borrowed from that elaborate work of our Learned Dr. *Willis de Anima Brutorum*, lately published. Which I hold my self bound here ingenuously to acknowledge, lest otherwise you might justly condemn me as a *Plagiary*, and that I may invite you also to the pleasure of attentively reading that useful Book. Wherein I found great part of what I had formerly read of that subject in various Authors, so well collected, digested and explained; that I chose from thence to copy an image of the Sensitive Soul of Man, whereupon I was often to reflect my thoughts, while I sate to describe the most remarkable of the Passions to which it is liable: and this I did the rather,

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ther, because at that time I had by me no other Book of the same subject.

You are not therefore to look upon the Description of the nature and affections of a Sensitive Soul therein delivered, as a supposition newly excogitated, and unheard of by former Ages. For two Men conversant in the Theories of Physiologists concerning that Subject, it is well known, that all the Ancients were so far from holding the Soul of a Brute to be other than *Corporeal*, that they for the most part taught their Disciples, that the Soul of *Man* was so to: except a few of them, namely *Pythagoras*, *Plato*, and in some favourable sense *Aristotle* (when he defined the Soul by that enigmatical term *εντολὴ χειρός*) and his Sectators, *Aristoxenus* and *Dicæarchus*, when they called it a *Harmony*. True it is indeed, they were much divided in their opinions about the *Substance* or *Matter* of a Soul; some imagining it to be of Fire, as *Heraclitus*, *Democritus*, *Hipparchus*, and the *Stoicks*; some conceiving it to be on the contrary, of a Watery nature, as *Hippou*, and *Thales*; others fancying it to be composed of Water and Earth, as *Xenophanes*; others, of Earth and Fire, as *Parmenides*; others again, of all the four Elements, as *Empedocles*: and yet notwithstanding they unanimously consented in these points, that this *Corporeal Soul*

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Soul is divisible; composed of particles extremely small, subtil and active; diffused through or coextens to the whole body wherein it is contained; produced at first by generation out of the seed of the parents; perpetually recruited or regenerated out of the purest and most spirituous part of the nourishment; subject to Contraction and Expansion in passions; and finally dissolved or extinguished by death. If you doubt of the truth of what I here say, I know not how more easily to convince you, than by referring you to the incomparable *Gassendus in Lib. 10. Diogen. Laert. cap. de natura, contexturaque Animæ ad mentem Epicuri*: where you find the same more amply delivered.

Mean while suffer me to recite a pertinent and memorable text of the *Lord Verulam's* (of the Advancement of Learning Book 4. Chap. 3.) that now comes into my head. " The Sensible Soul (saith he) must needs be granted to be a Corporeal substance, attenuated by heat, and made invisible. I say, a thin, gentle gale of Wind swell'd and blown up from some flamy and airy nature; indued with the softness of Air to receive impression, and with the vigour of Fire to embrace action; nourished partly by an oyly, partly by a watery substance; spread over

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“ the body ; presiding (in perfect creatures)
“ chiefly in the head ; running through
“ the nerves ; refreshed and repaired by
“ the spirituous part of the blood of the
“ arteries : as *Bernardinus Telesius* (*de re-
rum natura lib. 5.*) and his Scholar *Au-
gustinus Donius* have delivered it.

And as for the Bipartition of this Sensitive Soul into two principal members as it were, or active sources ; viz. the *Fiery* part, upon which *Life* depends ; and the *Lucid*, from whence all the faculties *Animal* are, like so many distinct rayes of light, derived : I will not affirm it to be very *ancient* : but yet methinks, I discern more than a shadow thereof in some lines of the same most acute *Lord Bacon* (*de vita & morte, explicacione canonis quartæ*) which are these.

*Spiritus vitalis omnis sibi continuatur, per quosdam canales, per quos permeat, nec tota-
liter intercipitur. Atque hic Spiritus etiam
duplex est : alter ramosus tantum, permeans
per parvos ductus, & tanquam lineas ; alter
habet etiam cellam, ut non tantum sibi conti-
nuerit, sed etiam congregetur in spatio aliquo
vo, in bene magna quantitate, pro analogia
corporis ; atque in illa cella est fons rivulo-
rum, qui inde deducantur. Ea cella præcipue
est in ventriculis cerebri, qui in animalibus
magis ignobilioribus angusti sunt ; adeo ut vi-
deantur spiritus per universum corpus fusi, po-
tius*

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tius quam cellulati : ut cernere est in Serpentibus, Anguillis, Muscis, quorum singulæ portiones abscissæ moventur diu : etiam Aves diutius, capitibus avulsi, subsultant ; quoniam parva habeant capita, & parvas cellas. At animalia nobiliora ventriculos eos habent ampliores ; & maxime omnium Homo. Alterum discrimen inter spiritus est, quod spiritus Vitalis nonnullam habeat incensionem, atque sit tanquam aura composita ex flamma, & aere ; quemadmodum succi animalium habeant & oleum, & aquam. At illa incensio peculiares præbet motus, & facultates. Etenim & fumus inflammabilis, etiam ante flamman conceptam, calidus est, tenuis, mobilis : & tamen alia res est, postquam facta sit flamma : at incensio spirituum vitalium, multis partibus lenior est, quam mollissima flamma ex spiritu vini, aut aliis ; atque insuper mixta est magna ex parte, cum substantia aerea ; ut sit & flammæ, & aereæ naturæ mysterium.

This place of that Prince of Modern Philosophers, the *Lord St. Albans*, conjoyned to that other of his immediately precedent, seems to me to contain a pourtrainture of the Sensitive Soul, drawn indeed as in perspective, in colours somewhat faint, and not accurately ground ; yet with good judgment, and bold strokes of the pencil, such as give it no obscure resemblance of the original. And if you (Sir) please to compare it with the more ample description of

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the same Sensitive Soul, lately set forth by *Dr. Willis*: it will not be difficult to you, to observe, in how many things they agree. ¶

The THIRD and last thing whereof I am here to advertise you, is, that in the description of many of the *Passions* likewise, I have interwoven some threds taken from the webbs of those three excellent Men, *Gassendus*, *Des Cartes*, and our Mr. *Hobbes*; who have all written most judiciously of that obstruse Theme. Nor will I otherwise excuse myself for being so liberal to you, of what I owe to the bounty of those richer Wits; than by reciting what your beloved *Seneca* said to his dear *Lucilius*, in defence of his adopting for his own so many wise and memorable sentences of his, and our *Oracle*, *Epicurus*: *adhuc de alieno liberalis sum. Quare autem alienum dixi? quicquid bene dictum est ab ullo, meum est.* Epist. 16. I will only add, as a reason of my so frank communication of these unpolished papers to you, who are my *Lucilius*, what the same *Latin Stoic* most affectionately professed to his, on the like occasion: *Ego vero cupio ista omnia in te transfondere, & in hoc gaudeo aliquid discere, ut doceam. Nec me ulla res delectabit, licet eximia sit & salutaris, quam mihi unisciturus sim. Si cum hac exceptione detur Sapientia, ut illam inclusam teneam, nec enunciem, rejiciam.* Epist. 6. ¶

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S U M M A R Y O F T H E C O N T E N T S.



Marcus Antoninus Philosophus, Libr.

eūs ēautōv 2. Sect. 2.

On ποτε τότο είμι, σωματία ἐσί καὶ πνευμάτιον, καὶ τὸ ιγνονικόν, &c. *Quicquid sum, constat id omne caruncula, animula, &c parte principante. Proinde mitte libros. Nec distrahere amplius: (nihil obstat, quo minus hoc facias) sed tanquam qui jam statim moriturus sis, carnes istas contemnas. Cruor est, & officula, & reticulum ex nervis, venulis arteriisque contextum. Quin & Animam considera, qualis sit. Spiritus est, sive aer, nec is semper idem, sed qui jugiter efflatus de-nudò resorbetur. Tertium restat, pars illa principatum gerens. Tu ergo sic tecum: Senex es: partem tui principem servire ulterius ne siveris; sed nec motibus à communione humana alienis raptari. Nec quicquam quod fato destinatum tibi fuerit, vel jam ascitum aversari, vel futurum pavere.*

B

Natural

Natural History OF THE PASSIONS.

SECTION I.

INTRODUCTION.

THE Reasonable Soul of Man seems to be of a Nature so *Divine* and *Excellent*, that it is capable of understanding all things that are in this Life intelligible; but yet so *reserved* and *abstruse* withal, that it cannot understand *itself*; as many most sublime Wits, who had long exercised and perplex'd themselves in enquiries into the hidden and mysterious
Essence

A Sensitive Soul.

3

Essence thereof, have at length ingenuously confess'd.

Well therefore may we without blushing, own our ignorance of this noblest part of ourselves, from which we derive all our *Knowledge*. Well may we without regret content our Curiosity with those faint glimmerings of light, which shine through the *Operations* of this Celestial guest in our frail and darksome Tabernacles of Flesh ; and which are reflected upon our Understanding, only from the illustrious *Effects* of its proper Powers and *Acts*.

What these *Powers* and *Acts* are, and how vastly they transcend the energies of a *Sensitive Soul*, how perfect & ever in its kind ; as also in what exercises of the Mind they are chiefly observable ; hath been by Sir *Kenelm Digby* in his Book of the *Rational Soul*, copiously declared. So that here they need not to be repeated. Nor indeed would such a prolix research be consistent with my present design ; which principally aims at a recollection of some notions, that have partly in reading, partly in meditation, occurred to me, concerning the various *Passions* of the Mind, their *Genealogy*, their first *sources* and *resorts*, their most remarkable *Differences*, *Motions*, and *Forces*, and in

Of the Nature of

fine, by what kind of *Connexion* and intercourse betwixt two so disparate Natures, the one Incorporeal, the other Corporeal, it is, that the *Rational* Soul is respectively coaffected by them. And this with as much brevity, as the amplitude of the Subject can admit ; with as much perspicuity, as my weak reason can attain unto, in an argument so sublime and difficult.

That I may then effect this my Design, if not so happily, as in the end to arrive at the certain and demonstrative Knowledge of the truth I seek ; yet so plausibly at least, as to form an *Hypothesis* by which the Nature and Reasons of the principal, and most predominant of our Passions, may be congruously and with probability explained: it is requisite I begin with these few *Preliminaries*.

1. What kind of thing I suppose the *Sensitive* Soul to be, as well in *Man*, as in *Brutes*.

2. What seems to me most consentaneous concerning the Original, Nature, and Royal Seat of the *Rational* Soul.

3. How, and after what manner I conceive *both* Souls to be connexed in *Man*, during this shadow of life.

4. How the *Rational* Soul may come to be affected by the motions of the *Sensitive*,
in

in some Passions ; and *this*, by predominion of *that*, in others ; and whence their mutual consent, and dissent.

For, my present Conceptions concerning these things, though I foresee, I shall not be able to establish them all upon Reasons irrefutable and cogent ; are yet nevertheless to be here premised, as *Postulates* or *Fundamentals*, for introduction and support of the following Theory about the Passions. These therefore I shall in their order, and concisely, and in a plain familiar Style, (such with which I am always best pleas'd, especially in Discourses Philosophical) set down, *tanquam præcognoscenda.* ¶

S E C T. II.

What kind of Substance the Sensitive Soul may be conceived to be.

AS for the F I R S T *Postulatum* ; the Art. 1. *Sensitive Soul* of a Brute Animal, I First Supposition, that conceive to be *Corporeal*, and consequent- a Sensitive Soul is Corporeal. ly *Divisible*, *Coextense* to the whole Body ; of a *Substance* either *Fiery*, or nearly resembling *Fire* ; of a *consistence* most *thin*

Of the Nature of

and *subtile*, not much unlike the flame of pure Spirit of Wine, burning in a paper Lantern, or other the like close Place.

Art. 2.
Two reasons of that
supposition.

First, I think it to be *Corporeal*, *Divisible*, and *Coextense* to the whole Body; and that for *two reasons*, among many others not the least considerable.

One is this; that many, and divers Animal actions are daily observed to be, at one and the same time, performed by divers Parts and Members of the Body: for instance, the Eye sees, the Ear hears, the Nostrils smell, the Tongue tasteth, and all exterior Members exercise their Sense and Motion, all at once. For as much then as betwixt the Body and Soul of a Brute, there is no *Medium* (both being intimately connexed) but the Members and Parts of the Body are Instruments fram'd for the use of the Soul; what else can be imagined, but that many and distinct portions of the Soul so extended, do inform and actuate the distinct Organs and Members of the Body; each in a peculiar manner, respective to the peculiar Constitution, Farbrique, and Office thereof?

The Other this; it is observed also, that Vipers, Eels, Earthworms, and most other *Reptils* being cut into many pieces; all pieces for a good while after retain a manifest

manifest Motion, and no obscure sense; for, being prick'd, they contract and shrink up themselves, as sensible of the Hurt, and striving to avoid it. And this probably from hence, that these less perfect Animals having their liquors, both Vital and Animal, of a consistence viscous, and not easily dissoluble or dissipable; and having their Soul, if not equally, yet universally diffused, and all its parts subsisting immediately in those liquors: cannot suffer a division of their Body, without division of their Soul also; the parts whereof residing for some time after, in the segments of the Body, may perhaps for that time continue to actuate them to Motion and Sense. It hath been more then once unhappily experimented, that the Head of a Viper hath bitten a Mans Finger, and Poysoned him too, above an hour after it had been cut off. Not by involuntary convulsion of the Nerves and Muscles of the Vipers Jaws, such as not rarely happen to Animals, in the torments of Death; for those probably could neither last so long, nor so regularly open and shut the mouth, and extend the two fang teeth, by contraction of their erecting Muscles: but certainly by an action voluntary, regular, and suggested by sense, and perhaps revenge too. Whence I am

apt to suspect, that not only part of the Vipers Soul, but *Anger* and *Revenge* also survived in the divided head. For, it is well known, the bite of a Viper is never *Venomous*, but when he is enraged: the Chrystalline liquor contained in the two little Glandules at the roots of his fang teeth, being then by a copious afflux of Spirits from the Brain, and other brisk motions thereupon impress'd, in anger (of all passions the most violent and impetuous) so altered, and exalted, as to become highly active and venenate; whereas at other times, when a Viper is not offended and provok'd, the same Liquor is found to be as harmless as the spittle of a Man in perfect health. But whether from the dangerous effects of this biting, the dire Symptoms that thereupon ensued, it be inferrible, or not, that in the abscinded head of the beast there remained any thing of *Anger* and *Revenge*: in my poor judgment 'tis very evident from the very act of biting, there still remained somewhat of *life*, *sense*, and *voluntary motion*. Which is sufficient to verify my present supposition, that a Sensitive Soul is divisible and coextense to the whole body it animates.

Secondly

Secondly, I think the same Sensitive Soul to consist of *Fire*, or some matter analogous to *Fire*: and the *Reasons* inducing me to be of this opinion, are many. Some I have formerly alledged, where I discourse of the *Flame of life* perpetually arising from accension of the Sulphureous and inflammable parts of the blood, while circulated through the heart and lungs: which therefore I abstain from reciting in this place. Others, that have since occur'd to my consideration, I am obliged here to expose to yours.

That the *Life*, or *Soul* of Brute Animals, is seated principally in their *Blood*; we are plainly taught even by the Oracle of truth it self, the dictates of the Divine Wisdom that created them: and that *Blood*, and *Fire* subsist by the same principles, viz. *Aliment* and *Ventilation*; is evident from hence, that a defect of either of these, doth equally destroy both the one and the other.

Should you here exact from me some description of the *Essence* of *Fire*, I should adventure to tell you, that it seems to be only a multitude of most minute and subtle particles, mutually touching each other, put into a most rapid motion, and by continual succession of some parts, and deceission of others, renewed: which

Art. 3.
Second
Supposition,
that the
substance of
a sensitive
Soul is fiery.

Art. 4.
Because
life is seat-
ed prin-
cipally in
the blood;
and can no
more than
fire subsist
without
perpetual
aliment and
ventilation.

con-

Of the Nature of

conserves its motion, and subsistence, by preying upon, and consuming the *Sulphureous* parts of its subject matter, or fewel, and the *Nitrous* parts of the ambient aer. For, even our sense bears witness, that from the particles of this twofold aliment, *Sulphureous* and *Nitrous*, resolved to the last degree of smallness, and by a most violent and rapid motion agitated, the forms of *Fire* and *Flame* (which differ only in degrees of density, and velocity of motion) do wholly result.

Nor doth the image I find drawn in my brain of the *Soul* of a *Brute*, much differ from this description of the nature of *Fire*. I conceive it to be no other than a certain congregation of most minute, subtil and agile particles, corpuscles or atoms (call them what you please) crowded together; which being, in the very first moment of life, put into brisk and most rapid motion, like that of the particles of *Fire* when first kindled; do so long conserve that motion, and their own subsistence, as they have a continued supply of convenient nutriment; sulphureous from the blood within, Nitrous from the aer without; and no longer. For we cannot but observe, that the Souls of all Brute Animals, of what kind soever, stand perpetually in need of a fresh supply of those

two

two sorts of aliment ; insomuch that so soon as the recruit fails, they languish and dye : no otherwise than the flame of a lamp grows weak and dim, and is extinguished, for want of oyl or air. But (what is very remarkable) besides *fire* and *life*, there is not to be found in all nature any other thing whatsoever, to whose act and subsistence such a supply of Sulphureous and Nitrous matter is necessary. Nor is any other motion in the World, whether it be of fermentation, ebullition, vegetation, or other whatever, besides that of *Fire* and *Life*, subject to be arrested and suppressed immediately from defect of aer. It was not then without very great reason, that our Master *Hippocrates* affirmed, *ψυχὴν αἱτὶ φύεσθαι, that the Soul is perpetually generated, or made anew :* and that *Aristotle* held, *τὸ ζῆν εἰ τῷ ἀναπνεῖν καὶ ἀπνεῖν, life it self to subsist by respiration.*

This you perhaps may judge to be but a faint and imperfect representation of the nature of a Sensitive Soul. And therefore it is requisite I endeavour to render it more lively, by adding a few touches more concerning the *Hypostasis* or *Subsistence* of such a Soul ; the *Life*, or *Act* ; and the principal *Functions*, or *Operations* of it.

For

Art. 5. For the *First* of these three considerables, viz. the *Subsistence* of a Sensitive Soul; it seems not unreasonable to conceive, that the Soul of a Brute doth consist of the very same Matter, of which the *organical Body* is formed: but of such particles of it as are select, most subtile, and active in the highest degree. Which, as the flower of the whole matter, in the *Body* it self is made. formation of the *Embrion*, emerging out of the grosser mass, and mutually uniting; first force passages convenient for themselves through the whole compage of the Body, and then constitute one continued, thin, and as it were spirituous Hypostasis, adequate and coextense to the same. For, so soon as any matter is disposed towards animation; by the law of the *Creation* (not by *Epicurus*'s fortuitous concourse of Atoms) the Soul at the same time, which is called the *Form*, and the Body, which is called the *Matter*, begin to be formed together, under a certain species, according to the model or *Character* impressed upon them. When the more agile, and spirituous particles of the seminal matter, having freed themselves from the other parts of it, quickly assemble together, and by little and little raising a commotion, stir up, and agitate the grosser particles, and by degrees dispose

pose them into fit postures and places, where they ought to remain and cohere ; and so form the body according to the figure or shape preordained by the Creator. Mean while this congregation of subtle and active Particles, or the Soul, which by expansion enlargeth it self, and insinuating her particles among others more gross, and as it were interweaving them, frames the body, is it self exactly conformed to the figure and dimensions of the same body, coextended and adapted to it, as to a case or sheath, doth actuate, enliven, and inspire all and all parts thereof. While, on the other side, the same Soul, apt and prone of it self to be dissolved, and vanish into aer, is by the Body containing it, conserved in its act and subsistence.

Now according to this notion, a Sensitive Soul may be conceived to be a most subtle body contained in a gross one, and in all points, of the same Figure with it ; or as it were a Spectre made up of exhalations, such as some vain, or superstitious heads have sometimes imagined to ascend from, and hover over the graves of the dead, and called them Ghosts. For, arising together with the body, out of the material principles of Generation rightly disposed ; it doth, as well as the body, receive

Art. 6.
A Sensitive Soul imagined to be of the same Figure also with the Body wherein it is contained.

its

its determinate subsistence, conform to the idea or Type consigned to it by the Law of Nature. But though the same be intimately united to the body, and every where closely intertex'd with all parts of it; as the warp and woof are interwoven in Cloth: yet so fine and subtle are the threads of which it doth consist, that it cannot possibly by our senses be discerned, nor indeed be known, otherwise than by its own Effects and Operations. Moreover, when by any violence done either to itself, or its Copartner, the Body, the life of this Soul is destroyed; instantly the particles of which it was composed, their mutual cohesion being dissolved, disperse themselves, and fly away, not leaving any the least print or mark of their late subsistence: and the Body now destitute of its conserving inmate, the Soul, speedily tends to corruption; which sooner or latter, according to the less or greater compactness of the parts of the body, dissolves that likewise into its first Principles, or Elements.

Art. 7.

That the Existence of a Sensitive Soul doth, as that of Flame, depend intirely upon Motion.

For the Second; it is not obscure, that the Existence of this Corporeal Soul depends intirely upon the *Act*, or *Life* of it: and in this very respect, seems exactly like to common *Flame*, and to that alone, inasmuch as the substance of both ceases to be,

be, in the very instant it ceaseth from Motion, wherein the very life of both doth consist ; nor can either of the two be, by any means whatever, redintegrated, so as to be numerically the same thing it was. From whence it seems a genuine consequence, that the Essence, or Being of a Sensitive Soul, hath its beginning wholly from life, as from the accension or kindling of a certain subtile and inflammable matter. To render this yet more plain ; when in the Genital matter, swarms of active, and spirituous, chiefly Sulphureous particles, predisposed to animation, have met with a less number of Saline particles, in a convenient *focus* ; being as it were kindled, sometimes by another Soul (as in all *Viviparous* Animals) viz. of the *Generat*, sometimes by their own rapid motion (as it happens in *Oviparous*) they conceive life, or break forth into a kind of flame, which thenceforth continues to burn so long as it is constantly fed with sulphureous fewel from within, and nitrous from without ; but instantly perisheth, when either through defect of such aliment, or violence from external agents, it comes once to be extinct. This Act of the Corporeal Soul, or enkindling of the vital matter, is in more perfect Animals, such as are furnished with hot blood, so

mani-



manifestly accompanied with great heat, fuliginous exhalations, and other effects of fire, or flame; that it is difficult for even the most Sceptical Person in the World to doubt, that the blood is really in a continual burning, and that life is rather Flame it self, than only like it. But in other Animals less perfect, and endowed with blood less hot; though we cannot say their Soul is properly Flame: yet we may say, it is somewhat very like it, namely, a swarm of most subtile, active and as it were fiery particles, or a spirituous *Hælitus*: which included in the body, doth move and agitate the denser mass thereof, and inspire the whole, and actuate all the members, and in some with admirable agility, even beyond that of more perfect Animals; as may be observed in some Reptiles and Insects. And that even in these there is a *fiery vigor* or force constantly acting, may naturally be inferred from hence; that while they remain not unactive and drowsy (as in winter usually they do) they can no more want the aliments of life, a perpetual supply of blood and aer, than Animals of a hotter constitution; as we shall soon declare. *

Art. 8.
That the
first opera-
tion of a
Sensitive

As for the *Third* and last considerable, viz. the *Faculties* and *Operations* of a Corporeal or Sensitive Soul; I shall only

in the general observe, that so soon as she begins actually to exist, she first frames for herself a convenient Seat wherein to reside, the body; and then organizeth the same body, making it (according to the platform or model preordained, and intimated by secret instinct) in all parts fit and commodious for all uses necessary, as well to the propagation of *the Species* (for still Nature doth, though the Soul it self may not, aim at Eternity) as to the conservation of the *individual*. For which uses she is furnished with many and various *Faculties* or Powers; all which she duly exerciseth, according to the various instincts, and intimate suggestions of her Governess, Nature, in acts of several sorts; though all performed in almost one and the same manner, and as it were by the conduct of Fate, or eternal decree of Divinity congenial to her very Essence. To enumérate, and particularly recount all the natural *Faculties* with which the Souls of Brutes are endowed; all the various *Habits* resulting from practise and long exercise of those Faculties, is neither pertinent to my present institute, nor easy to be done: because of their almost infinite diversity, respective to the immense diversity of kinds of sensitive Creatures. For, as some Animals

C are

are of a more, others of a less perfect order; and as they are diversly configurated, according to the several places in this great Theatre of the World, in which they are consigned to live and act their several Parts: so we see their Souls are, by the wise bounty of the Creator, instructed with diverse inclinations, faculties, and appetites, directive to the ends to which they were predestined. In a word; since there ought to be an exact proportion and congruity betwixt every organical Body, and the Soul that informs and animates it; and that for that reason, Nature seems to have diversified and distinguished the various Kinds of Brute Animals, by an equal diversity of their bodily structures and configurations, easily discernable by the sight: we may even from thence alone conclude, that their Corporeal Souls likewise are no less various, and endowed with Faculties and Proprieties answerably different.

Whoever then shall attempt to enrich *Philosophy* with a perfect Catalogue of these so different *Faculties* and *Proprieties* observable among Brutal Souls; will find himself obliged, first to compose a better *Natural History* of all sorts of Animals, than any we yet have, and then

to deliver also a true and full account of the various Structures of their Bodies, from a *Comparative Anatome* of them. A work indeed most desirable and highly delightful, but equally difficult and laborious ; not to be performed, I fear, by any single hand. But were it much less difficult ; sure I am, you know my incapacity too well, ever to expect it from mine : and what hath been already said by me here, in the general, touching the nature of a Sensitive Soul ; is enough to render my *First Preliminary* probable.

For, from thence it may, without contradiction to either Reason, or Observations Anatomical, be conceived (1) in what manner the Soul of a Brute may be at first *produced* by *accension* of the most spirituous particles of the *Seminal Humor*, in the womb of the Parent, as one flame is kindled by another : (2) how the same Soul then *forms the Organical Body* out of the grosser parts of the same seed, after the figure or type pre-design'd by the Divine Protoplasm at the Creation, whose wisdom directs and regulates it in that admirable work : (3) How it afterwards comes to *conserve, expand and augment* itself, as the dimensions of the body are by degrees enlarged, until it arrive at its perfection or standard of growth ; by ac-

Art. 9.
A recapitulation
of the pre-
mises.

Of the Nature of

cension of more and more of the inflammable parts of the *Nourishment* daily renewed, and converted into laudable blood; as the flame of a lamp is kept alive by a perpetual accension of fresh parts of oyl; (4) How the *Duration* of the *Body* depends intirely upon the subsistence, or perpetual renovation or regeneration of the Soul; and how immediately upon the Souls Extinction, the body submits to *corruption*; no otherwise than as Wine dyes, and degenerates into a *Vappa*, so soon as the Spirit that preserv'd it in vigour and generosity, is evaporated, or suppress'd.

Now to the end this Corporeal Soul
 Art. 10. The *Faculties* or invisible Flame, may the better thus and *Organs* of animate the Body, and actuate it to sensible *Sensitive Soul*, and voluntary motion; Nature hath most reciprocally inservient each wisely institued, that her *Organs*, and *Faculties* should all of them be reciprocally inservient or official each to other, in their acts and operations. For, as out of the grosser parts of the Nutritive juice, prepared and elaborate in the Stomach and other instruments of concoction, the decays of the solid parts of the Body are daily repaired: so are the decays of the Soul itself likewise repaired out of the more subtile and spirituous particles of the same juice: which continually

ally brought afresh to the blood, as oyl to a Lamp, and kindled therein, restore both the *Flame* and *Light* of the Soul, which would otherwise quickly be consumed, and perish. More expressly; while the purer part of the Nutritive liquor feeds and renews the Lamp of Life, or flame of the blood; the most active, and most spirituous particles discharged from that flame, are carried up, and insinuated into the Brain: and there recruit or regenerate the other part of the Soul, viz. the *Sensitive*. And so the conversion of Chyle into blood, is an operation not only consequent to, but in some sort also dependent upon the Conversion of meat and drink into Chyle: and on the other side, the *Animal* faculty gratefully requites the good offices of the *Vital*, and both as amply recompense the services of the faculty of Chylification; in that the *Animal* Spirit confers the pulsific Power, by which the heart and arteries drive the current of the blood in a perpetual round, for the reaccension of its inflammable parts; and the Bowels ordained for concoction of the aliment, at the same time borrow, as their enlivening heat from the flame of the blood, so their virtue both *motive* and *sensitive* from the constant afflux of *Animal* Spirits, with-

out which, they cannot duly do their offices. Thus you see the brain is behol- den to the Heart, both to the stomach ; and reciprocally the stomach is assisted by them : and all parts conspire, by contributary helps, to continue the Soul in its subsistence, as that again acts perpetually to the conservation of herself and them.

Art. 11. *A two fold desire or inclina-* *tion congenial to a Sensitive Soul ; viz. of on self-preservation, and Propagation of her kind.* *voeġōv* (as Aristotle not improperly calls it) is strictly obliged by a twofold inclination of *on* or desire, innate or congenial to her.

To this, the *Sensitive Soul*, or $\pi\delta\tau\epsilon$ endeavours constantly to affect by being sollicitous for convenient food, out of whose inflammable parts actually incen- sed, she may every minute redintegrate her own flame. The other, that of *Propagating her Species*, or producing, by the same way of accension, other Sensitive Souls of the same kind ; that so by an uninterrupted succession of her like, she may attain to that perpetuity, which is denied to her single or individual self. And to this end, she carefully selects out of her stock of aliment, matter fit for generation, stores it up in the Genital parts, and is possess'd with an earnest longing to transmit the same into a place most commodious for its accension into new Souls.

For,

For, as it is by natural instinct, that every living Creature is from its very birth, directed to choose food most agreeable to its nature, and daily to feed thereupon ; aswell that the grosser web of the body may from thence, by insensible addition and assimilation of new parts, be augmented more and more, until it attain to due magnitude, or perfection of stature : as that the finer intertexture of the Soul may be, by continually repeated supplies of Spirits, rendred equal and coextense to the body, and inable to execute all her functions vigorously and effectually : So it is also from the same natural instinct, that when by that gradual amplification of all lineaments of both Body and Soul, the living Creature hath at length arrived at its full strength and growth, the Animal Spirits then begin to abound, and swarm in greater multitudes than is necessary to the uses of th' individual ; and the luxuriant or superfluous troops of them, together with a certain refined and generous Humor derived from the whole body, are daily transferr'd into the *Genitals* (natures both Laboratory, and Magazin for propagation of the *Species*) there to be further prepared, and formed into the *Idea* of an Animal exactly like to the first Generant,

Of the Nature of

which afterwards is in the amorous congress male and female, transmitted into the Womb, therein to receive its accomplishment.

Having thus lightly described the principal Faculties, and innate Dispositions of a Sensitive Soul, as also the Fundamental Laws of her Oeconomy ; it remains only, that we consider the various *Mutations*, and irregular *Commotions* to which she is liable.

Art. 12. That the Corporeal Soul, while as a Flame burning within her Organical Body, she on every side diffuseth heat and light, is her self subject to various Tremblings, Noddings, Eclipses, Inequalities, and disorderly Convulsions, as all Flame is observed to be ; this (Visay) is not obscurely discernable, in the Effects of those Alterations, which happen chiefly in her more violent Passions, though indeed not so clearly and distinctly discernable in Brutes, as in Men ; in respect they are subject to fewer Passions than Man is, and want the Faculties of Speech to express any one of those few they feel in themselves. Wherefore that we may in some order briefly recount the most remarkable at least of these turbulent Affections incident to the Sensitive Soul ; we shall shew what Alterations she may suffer, (1.) From

her own Passions.

her own proper *Passions* ; (2.) From the temperament and diseases of the *Body* ; (3.) from various impressions of sensible *Objects* ; and (4.) from exorbitant motions of the *Animal Spirits*.

Most certain it is, that the Flame of the Soul doth not always burn equally, or at one constant rate ; but now more, now less ; sometimes briskly and clearly, sometimes dully and dimly. For, it is not only enlarged, or contracted, according as the fewel brought to feed it, is more or less in quantity, and more or less sulphureous in quality : but the very accension of it in the Heart, though of itself moderate and equal, is yet sometimes so varied by the fannings as it were of the Passions ; that one while it blazeth up to a dangerous excess, as it usually happens in great *Anger* and *Indignation* ; another while it is in danger of being blown out, by suddain and surprizing *Joy* ; or almost suffocated, by unexpected *Terror*, or astonishing *Grief*. The like may be said of the rest of the Passions, or strong Affects, by whose various motions the Flame of life, like the flame of a candle exposed to the Winds, is variously agitated and changed : as will more clearly appear from our ensuing discourse of the Passions in particular.

Nor

Art. 13.
From the tem-
perament and
diseases of the
Body.

Nor is it from the suddain puffs, or impulses of Passions alone, that such imputations and inequalities as these proceed. Sometimes it comes to pass, that the Vital Flame by slow degrees, and as it were *Heckically* diminished, becomes little, pale, faint and half-extinct; as may be observed in colder temperaments, in *Leucophlegmatic* bodies, in *Hydropic* Persons, in Virgins troubled with the *Green-sickness*, and other the like chronic Diseases. In which the blood being more serous or watery than it ought to be, yields but little flame, and that too inconstant, and beclouded with fume and vapour; like that which ariseth from wet and green Wood. On the contrary, it sometimes happens, that the blood being immoderately sulphureous, is almost wholly put into a conflagration; as is frequently observed in *Choleric* Constitutions, and *feverish* distempers, and great *debanches* with Wine. And as by these and such like disorders of the Blood, the accension of the Vital Flame is with respective variety altered: so likewise do the *Lu-cid* particles that arise to the brain from thence, and constitute the beamy web of *Animal Spirits*, become more, or less luminous, and regular, or irregular in their motions. For instance; From the

dimi-

diminished or restrained accension of the blood, the sphere of the *Sensitive Soul* is contracted into less compass than that of the body, and reduced to such narrowness, that it cannot re-expand itself so as to illustrate all the brain, and actuate the whole contexture of the nerves, with requisite brightness and vigour. And on the other side, when the flame of life is much *intended* or increased (provided it blaze not to the hight of a fever) then the whole system of Animal spirits thence deradiated, being proportionably augmented, *swells* to an expansion beyond the limits of the body; insomuch that a Man transported and exulting for great *Joy*, or puffed up with *Pride*, seems to be inflated above measure, and hardly able to contain himself within the modest bounds of his own dimensions.

Besides these Alterations which the *Sensitive* or *Lucid* part of the Soul suffers from the various changes of the Vital; there are others, and those very many, which it receives immediately both from affections of the *Brain*, and *Nerves*, and from *External* objects making impressions thereupon: which perturb the consistence, and usual order of its parts. For example, at night, the *Brain* itself,

Art. 14.

From various
impressions of
sensible objects,
and exorbitant
motions of the
Animal Spirits.

from a too plentiful infusion of the Nutritive liquor, as from a gloomy cloud overcast, seenis replete with vapours ; so that in sleep, the *Lucid* part of the Soul is wholly obscured, and envelopped as it were with darkness. Nor is it rare to have *Eclipses* of one, or more of the Faculties Animal, meerly from some *morbific* matter, or gross humor fixed somewhere in the brain, and obstructing the ways of the Animal Spirits. Sometimes these Animal Spirits are not *themselves* sufficiently pure, clear and bright ; but infected and beclouded with incongruous steams, saline, vitriolic, nitrous, and other the like darksom exhalations ; which deform the images of things drawn in the brain, change them into false and chimerical representations, and raise exorbitant motions of the Spirits. Whence it sometimes comes to pass, that the whole Soul undergoes various metamorphoses, and is invested in strange apparations, and confused with delusory whimzies : as it too frequently happens to Men in *Hypochondriacal Melancholy*, and *madness* ; and likewise in *drunken* fits.

Art. 15. And as for the various *Gestures* of the Soul, by which respectively to the various *Gestures* of a *sensitive Soul*, she expresseth one while *Gladness* and *Pleasure* ;

sure ; another, *Aversion* and *Offence* : it is worthy our observation, that sometimes she is allured *outwardly* into the organ of some one of the senses, and that she occasionally crowds herself into the Eye, Ear, Palate, or other instrument of sense, there more nearly to approach and entertain the pleasing object ; sometimes on the contrary, to avoid an Evil she apprehends, and decline an entrocne with an ingrateful object, she retreats *inwardly*, and leaving her watches, shrinks up herself, as if she laboured to hide her head from the danger threatned. So that we can scarcely perceive, or imagine any thing without disquiet and commotion : and at the apprehension of almost any object whatsoever, the whole Soul is moved, and put into a trembling, and the substance of it variously agitated, as a Field of Corn is waved to and fro by contrary gusts of Winds.

Nor do these agitations, especially if they be any whit violent, stop at the *Sensitive* part of the Soul, or Spirits *Animal* (which I imagine to make a kind of *lucid Fluidum*, subject to Undulations or waving motions throughout, upon either external, or internal impulses.) but, as waves rowl on till they arrive at the shore, are carried on, by an Undulating motion

motion, even to the *Vital* part glowing in the blood ; and impelling the flame thereof hither and thither, make it to burn unequally. For so soon as an object is either by the sense, or by the Memory, represented to the Imagination, under th' appearance of Good, or Evil ; in the very same instant it affects, and commoves the *Animal Spirits* destined to maintain the Pulse of the heart : and by their influx, causing the Heart to be variously contracted, or dilated ; consequently renders the motion, and accension of the blood variously irregular and unequal. And thus you see in what manner the two parts of the Sensitive Soul, the *Vital* flame, and the *Animal* spirits, reciprocally affect each other with their accidental alterations. But this you may understand more clearly and fully from the following Theory of the Passions, where we shall enquire into the Reasons and Motions of them more particularly.

Art. 16.
An Enquiry
concerning
the Knowledge
whereby Brutes
are directed in
actions voluntary.

Mean while I find my self in this Place arrested by a certain mighty *Difficulty*, which though perhaps I shall not be able to overcome, ought nevertheless to be attempted ; not only for its own grand importance, but because without some plausible Explication of it at least, all our pre-

precedent speculations concerning the nature and proprieties of a Sensitive Soul, will fall to the Ground ; as an arch that wants a key, or middle-stone to support all the rest.

It is concerning the *Knowledge* of Brutes, by which they are directed in actions *voluntary*.

For, supposing all we have hitherto been discoursing of, the *Origin*, *Subsistence*, *Subsistence*, *Parts*, *Faculties*, *Inclinations*, *Passions* and *Alterations* of a Corporeal Soul, to be true and evident (which is more than I dare assume) yet doth it not from thence appear, what such a Soul can, by her own proper virtue, do more than a *Machine* artificially fram'd and put into motion. To speak more plainly ; tho it be granted ; that first th' impression made by an external object upon the instrument of sense, doth by impelling the Animal Spirits inwards, and by disposing them into a certain peculiar figure, or mode (as the *Cartesians* speak) cause the act of *Sensation*, or simple *Perception* ; and that then the same spirits rebounding, as it were by a reflex undulation, outward from the brain into the nerves and muscles, produce *local motions* : granting this, I say, yet still we are to seek, How this Soul, or any one part of it,

comes

Of the Knowledge

comes to be *conscious* of Sensation, or how it can, by a *reflex* act (as the Schools phrase it) *perceive that it doth perceive*, and according to that perception, is impell'd to diverse acts, directed to an *appetite* of this, or that good, and sometimes in Prosecution of the good desired, to perform *actions* that seem to be the results of *Counsel* and *deliberation*, such as are daily observed to be done by several sorts of Beasts, as well wild as domestic. In *Man* indeed, it seems not difficult to conceive, that the *Rational* Soul, as president of all th' inferior faculties, and constantly speculating the impressions, or images represented to her by the *Sensitive*, as by a mirrour; doth first form to herself *conceptions* and *notions* correspondent to their nature, and then proceed to acts of *Reason*, *Judgment* and *Will*. But as for *Brutes* that are irrational; in what matter the perception, distinction, appetite, memory of objects, and other acts resulting from an inferior kind of Reason, are in them perform'd: this, I confess, is more than I can yet understand. Some there are, I know, who rather then acknowledge their insufficiency to solve this Problem, have attributed to *Brutes* also Souls *immaterial*, and *substant* after separation from

from their bodies. But these considered not, that the Soul of a Brute, however docil and apprehensive, and using organs in their structure very little (if at all) different from those in the Head of Man, can yet have no capacity of Arts and Sciences, nor raise it self up to any objects, or acts, but what are *Material*: and that by consequence, the same is different from, and inferiour to the *Rational* Soul of Man, and *material*. So that instead of solving the Doubt, by teaching us, how from a certain Modification of subtil *matter*, there may result such *Power*, which residing in the brain of a Brute, may there receive without confusion all impressions or images brought in by the Senses, distinctly speculate, judge and know them, and then raise appetites, and employ the other faculties in acts respective to that knowledge, and to those appetites: instead of this, I say, they have entangled themselves in an absur'd Error, ascribing to a thing meerly *material*, a capacity of knowing *objects immaterial*, and performing *actions* proper only to *immortal* Beings.

We are therefore to search for this Power of a Sensitive Soul, by which she is *conscious* of her own perception, only in *Matter* in a peculiar manner so, or

Of the Knowledge

so disposed or modified. But in what matter? this of the *Soul*, or that of the *Body*? Truely, if you shall distinctly examine either the Soul or the Body of a Brute, as not conjoyned and united into one *Compositum*; you will have a hard task of it, to find in either of them, or indeed in any other material subject whatever, any thing to which you may reasonably attribute such an *Energetic* and *self-moving Power*. But if you consider the *whole Brute*, as a *Body animated*, and by divine art of an infinite wisdom designed, framed and qualified for certain ends and uses: then you may safely conclude, that a Brute is, by the law of the Creation, or institute of Almighty God so comparated, as that from Soul and Body united, such a confluence of Faculties should result, as are necessary to the ends and uses for which it was made. Do but convert your Thoughts awhile upon *Mechanic Engines*, and seriously contemplate the Motions, Powers and Effects of them. They are all composed indeed of gross, solid and ponderous Materials: and yet such is the design, contrivance and artifice of their various parts, as that from the Figures and Motions of them, their result certain and constant operations, answerable to the intent of the Artist,

Artist, and far transcending the forces of their divided ingredients. Before the invention of *Clocks* and *Watches*, who could expect, that of Iron and Brass, dull and heavy Metals, a Machine should be framed; which, consisting of a few Wheels indented, and a spring regularly disposed, should in its Motions rival the Celestial Orbs, and without the help or direction of any external Mover, by repeated Revolutions measure the successive spaces of time even to minutes and seconds, as exactly almost as the diurnal Revolutions of the Terrestrial Globe itself? and yet now such Machines are commonly made even by some Blacksmiths, and Mens admiration of their pretty artifice long since ceased. If then in vulgar Mechanics, the contrivance and advantagious disposition of matter, be more noble and efficacious than Matter itself: certainly in a *Living Creature*, in a *Body aninate*, the Powers emergent from a conspiracy and co-operation of so many, so various organs, and all so admirably formed, ought to be acknowledged incomparably more noble, and more Energetic. If the Art of *Man*, weak and ignorant *Man*, can give to bodies, of themselves weighty, sluggish and unactive, figure, connexion and motion fit to pro-

Of the Knowledge

duce effects beyond the capacity of their single natures? What ought we to think of the divine art of the *Creator*, whose *Power* is infinite, because his *Wisdom* is so? Could not He, think you, who by the voice of his Will call'd the World out of *Chaos*, and made ~~so~~ many Myriads of different Beings out of one and the same universal matter; could not He, when He created *Brutes*, so fashion and organize the various parts and members of their Bodies, thereto so adjust the finer and more active contexture of their spirituous Souls, and impress such motions upon them, as that from the union and coorporation of both, a *Syndrome* or conspiracy of Faculties or Powers should arise, by which they might be qualified and enabled to live, move and act respectively to the proper uses and ends of their Creation? Undoubtedly He could; and 'tis part of my belief, that He did. Nor do I more wonder at the *Knowledge* of Beasts, by which they are directed in the election of objects, and in the prosecution or avoidance of them; than I do at their simple *Perception* of them by their outward senses: Since I conceive the one to be as much *Mechanical*, as the other, though perhaps the reason of the one, is of more difficult explication than that of the other.

When

When you hear the Musick of a *Church Organ*, is it not as pleasant to your mind, as the Musick is to your ear, to consider how so many grateful notes, and consonances that compose the charming Harmony, do all arise only from wind blown into a set of pipes gradually different in length and bore, and successively let into them by the apertures of their valves? And do you not then observe the Effect of this so artificial instrument highly to excell both the Materials of it, and the hand of the Organist that plays upon it? The like Harmony you have perhaps sometimes heard from a *Musical Water-work*, as the vulgar calls it; an *Organ* that plaied of itself, without the hands of a Musician to press the jacks, meerly by the force of a stream of Water opening and shutting the valves alternately, and in an order predesign'd to produce the harmonical sounds, consonances and modes requisite to the composition, to which it had been set.

Now, to the *first* of these *Organs* you may compare a *Man*; in whom the *Rational* Soul seems to perform the office of the *Organist*, while governing and directing the Animal Spirits in all their motions, she disposeth and ordereth all Fa-

culties of the inferior, or Sensitive Soul, according to her Will and Pleasure: and so makes a kind of Harmony of *Reason, Sense, and Motion.*

And to the *Other*, or *Hydraulic* Organ you may compare a *Brute*, whose *Sensitive* Soul being scarcely moderator of her self, and her Faculties, doth indeed in order to certain ends necessary to her nature, perform many trains of actions; but such as are (like the various parts of an Harmonical Composition) regularly prescribed (as the notes of a Tune are prick'd down) by the law of her creation, and determined for the most part to the same thing; viz. the Conservation of herself. So that she seems to produce an Harmony of *Life, Sense and Motion.*

But this *Analogy* seems to be much greater in *Brutes* of the *lowest* order, such upon whose Souls or Natures there are not many Types or Notes of actions to be done by them, imprinted; and which, according to that common saying of the Schools, *Non tam agunt, quam aguntur*, act rather by necessary Impulse, or constraint, than freely, and of their own accord: than in more perfect Animals, whose actions are ordained to more, and more considerable uses; and upon whose

Souls therefore more original lessons are as it were prick'd down ; and to which we cannot justly deny a power of both *varying* those innate prints, and *compounding* them on with another occasionally. Which Power seems to be radicated in the *Corporeal Soul*, by nature so constituted, as to be *knowing* and *active* in some certain things necessary to it ; and capable also of being afterward taught, by various accidents usually affecting it, both to know other things, and to do far more, and more intricate actions.

All the *Knowledge* therefore these more *perfect* Brutes are observed to have, must be either *Innate* or *Adventitious*. The *Former* is commonly nam'd *Natural Instinct* ; which being by the Omnipotent Creator, in the very act of their Formation, infused, and as an indelible Character impress'd upon their very Principles or Natures ; both urges them to, and directs them in certain actions necessary to the prorogation of their Life, and to the propagation of their kind. The *Other* is by little and little *acquired*, by the daily *perception* of new *objects*, by *imitation*, by *experience*, by *Mans teaching*, and by some other ways : and in some Brutes, is advanced to a higher degree than in others. Nevertheless this same acquired cogni-

Art 17.
The Knowledge of Brutes, either Innate or Acquired.

Of the Knowledge

tion, and *Cunning* also (how great soever) doth in some of them depend altogether upon *instinct natural*, and the frequent use of it.

Here it would not perhaps be very difficult for me to recount, what sorts of *actions* done by more perfect Beasts, are referrible to their *Congenite Knowledge* alone; what to their acquired alone; and what to a combination of both. I could also shew how their acquir'd knowledge ariseth by degrees from impressions of new objects, from examples, or imitation, from experience and other adventitious helps just now mentioned. I might moreover explain in what manner the *direct* images of things brought into the common Sensory, produce first *Imagination*, and then *Memory*; how the same images *reflex'd*, instantly raise *Appetite*, if they appear good and agreeable; or *Aversion*, if displeasing and hurtful; and how thereupon in the same instant *Local Motions* succeed, for prosecution, or avoidance of the things themselves. All these, I say, I might deduce from notions competent to a *Corporeal Soul*, and form the Powers of a Body informed and actuated thereby, both being comparated for such determinate actions by artifice Divine; without bringing in
to

to the scene any *immaterial* natures (as some have done) to solve the difficulties concerning the science or knowledge of Brutes. But because these arguments have been already handled by many excellent Men, and curious Wits, *Sir Kenelm Digby, Monsieur des Cartes, Mr. Hobbes, &c.* and most accurately by *Dr. Willis*, in his late Book *de Anima Brutorum*, and because a further inquisition into them is not absolutely necessary to my design of explicating the Reasons of the *Passions*: I therefore shall add no more concerning them; but contenting myself with the hints I have given, conclude this Section with two pertinent and remarkable clauses.

Manifest it is, that all Brute Animals of what kind soever, are by *natural instinct* alone, as by an eternal rule, or law engraven upon their Hearts, urged and directed to do all things that conduce either to their own *defense* and *conservation*, or to the *propagation* of their *species*. And hence it is necessarily consequent, that in order to their observance of this congenite law, or accomplishment of these two grand Ends of their Creation, they must all, by the dictates of the same *natural instinct*, both *know*, whatever things are *convenient* and *beneficial*, whatever

Art. 18. That Brutes are directed only by *natural instinct*, in all actions that conduce either to their own *preservation*, or to the *propagation* of their *species*: not by *Reason*.

Of the Knowledge

ever are *inconvenient, hurtful* and *destructive* to them ; and according to this knowledge , prosecute these with *hatred* and *aversation*, those with *love* and *delight*. When therefore we observe *Brutes* to distinguish betwixt wholesome and venomous plants, to seek for convenient food, cunningly to hunt after prey , retreat from injuries of weather, provide themselves denses and other secret places for rest and security , travel from one Climate to another, and change their stations at certain periods and seasons of the year, to love their benefactors, and fly from their enemies, to court their mates, build nests and other nurseries for their young, to suckle, feed, cherish, protect and teach them, to use a thousand pretty shifts and artifices to elude their pursuers, in fine, to manage all their affairs regularly and prudently, as it were by counsel and deliberation, in order to the two principal ends preordained by the Divine Wisdom : When we (I say) observe all these their actions, we are not to refer them to a principal of *Reason*, or any *free and self-governing Faculty* (like the *Rational Soul of Man*) wherewithal they are endowed ; but only to *Natural Instinct*, by which they are incited and directed.

Neither are we to give credit to their opinion who hold, that all such actions arise from a kind of *Material Necessity* (such as *Demoritus* fancied), and without any intention, or Scope aimed at by the Beasts themselves ; merely from the *congruity* or *incongruity* of images impressed upon the organ of the sense affected : as if Brute Animals were as little conscious of their own actings, as artificial Engines are of their motions, and the reasons of them.

Art. 19.
Nor Material
Necessity.

For we cannot but observe, that Brutes, by virtue of natural instinct, perform not only *simple* acts excited by some one single impression made upon this or that Sensory, by an external agent, or object ; as when the scorching heat of the Sun in Summer beating upon them, makes them to retire to cool and shady places for refuge : But also many other *Compound* actions, such to which a long series, or chain of subservient acts is required. For instance ; in the Spring, when Birds feeling the warmth and invigorating (I had almost call'd it also the *prolific*) influence of th' approaching Sun (that Universal Adjutant of Generation) find themselves pleasantly instigated to their duty of *Propagation* ; then, without any other impulse, or direction, but that of natural instinct, they dexterously ,

and

and as it were with counsel and deliberation, address themselves chiefly to that most delightful work. First, with a kind of cheerful Solemnity they choose, and espouse their Mates, all their Females bringing love, obsequiousness, diligence and feather-beds for their dowry. Then they seek for places convenient to reside in, and there with skill and art exceeding the proudest of human Architecture, they build their Nests. Which are no sooner finished, than they lay their Eggs therein. Upon these in the next place they sit with admirable constancy and patience, until they have hatch'd them. And that great work done, they in fine with exemplary tenderness and care feed, cherish and protect their young, till they are able to live of themselves. Now here, you see, is a multiplicity of actions regularly and with design done in order to one grand scope, or end : such as cannot possibly proceed from simple impressions of external objects. 'Twere easy for me here to invite you to reflect on the admirable Republics of *Bees* and *Pismires*, in which all the constitutions of a most perfect Government are exemplified: yet without written laws or promulgation of Right: but the former example is sufficient. I conclude then, that since in all these

these; the affairs or businesses of Brutes are managed and administred always after one and the same manner, without any variety: that is a convincing argument, that the enterprises and works of Brutes of this sort, are excited neither by *external objects*, whose impulse is ever various; nor by any internal *purpose* of mind, which is more mutable than the Wind; but by a principle more *certain* and *fix'd*, and always *determined* to one thing; which can be nothing else but *Natural instinct*.

And how far the power and influence of this *instinct* may extend toward the excitation of the various *Passions* to which the *Sensitive Soul* is of her own nature subject and prone; will appear more clearly from our subsequent Enquiry into their proper causes and motions: to which I now hasten; having thus long detained you in hearing what seems to me most probable and consentaneous to reason, concerning the substance, original, proprieties and faculties of the *Sensitive Soul*, common to Man with Brutes. Which was my first *Preliminary*. ¶

S E C T. III.

Of the Nature, Origin, and principal Seat of the Rational Soul in Man.

Art. I.
The Excellency of a Rational Soul.

HOW neer so ever Brute Beasts may be allowed to approach to the Divine faculty of *Reason*, or *Discourse*; yet most certain it is, no one of them hath ever been observed to *attain* thereunto. For, if we with all favor and partiality imaginable, examine the *Effects* of either their *innate*, or *acquired Knowledge*, or of *both* conjoyned, and improved into *Habits* by long practice and experience; yet in the end we shall be forced to confess, that even the most intricate, and most cunning of all their actions, come short of those that are ordinarily done by *Man*, by virtue of the *Reasonable Soul*, wherewith he is by the immense bounty of his Creator, endowed.

This is a *Verity* so obvious to every Man of common sense and understanding, so evident by its own splendor; that it needs neither *Arguments* drawn from reason

son to establish, nor Examples drawn from frequent observations to illustrate it: Especially now after the many excellent discourses thereupon, written by Learned Men of almost all ages, all nations, all professions. It being therefore unnecessary for me by prolix reasoning to evince, and superfluous by multiplicity of instances to elucidate the vast disparity betwixt the proper *Acts* and *Operations* of a *Reasonable Soul*, and those inferior ones of a *Sensitive*: I shall only in brief, and analytically recount to you a few of those many *Excellencies* and *Prerogatives* essential to the former, and by the law of nature incommunicable to the latter.

The *Preeminence* then of Mens *Reasonable Soul* is undeniably manifest from both her *Objects*, and her *Acts*.

Her *Objects* are all things whatsoever, true or false, real or imaginary, within or without the World, sensible or insensible, infinite or finite: for to all these can she extend her unconfined power of speculation. I doubt indeed, whether it be possible for her in this life, while she is obliged to speculate all things by the help of images, or corporeal representations, to have an adequate, and full cognition of the superexcellent nature of

God:

Art. 2.
Manifest
from her
proper Objects.

The Nature and Excellency

God : But yet it cannot be denied, that she is capable of knowing for certain, that there *is* such an incomprehensible Being as God, and that He is *Infinite* and *Eternal*. I doubt also, whether the Mind of Man be capable of any true notion of an *Angel*, *Spirit*, *Dæmon*, or other the like Beings which the Schools commonly (how intelligibly, let others dispute) call *immaterial Substances*; because I my self can represent to my Thoughts nothing but under some certain figure and quantity, which are inseparable from body : And yet who dares deny th' *Existence* of such Beings in the World? To speculate such objects then, as fall not under the perception of any of the Senses, is the prerogative of a *Rational* Soul: nor can a *Sensitive* possibly have any knowledge of things above the sphere of her own nature; all her faculties being *corporeal*; and by consequence *limited* to corporeal objects, and those too no other than what are perceptible by the *senses*.

Art. 3.
And *Act*s.

Her *Act*s also equally declare her transcendent Powers. That Act of simple apprehension, which in Brutes is *Imagination*, is in Man *Intellection*: and the intellect presides over imagination, discerning the Errors of it occasioned by the *senses*, and correcting them; yea subliming

ming the notions thereof into true and useful ones. And as for forming of *Propositions*, by compounding or dividing the simple notions of sensible things ; that power is indeed common to the *Sensitive Soul* also, and usually exercised by her, when an image of some object newly admitted, meets with one or more images either formerly stored up in the Memory, or at that instant suggested by natural instinct ; and is found associable, or repugnant to them : but yet the same falls incomparably short of that which belongs to the *Human Intellect*. Which doth not only *review* all propositions conceiv'd from the *Phantasy* ; but *judges* also whether they be true or false, congruous or incongruous ; and then orders and disposes them accordingly into trains of notions convenient either to *Speculation*, or to *Practice*. Moreover, it restrains the *Phantasy*, of itself instable and prone to ramble through various phantasms ; calls it away from extravagant and useless conceptions, directs it to others more conform to reason, and at pleasure confines it within certain bounds, that it may not divert, or rage too wide from the purpose. All which Acts give clear evidence, that there is in *Man* a Soul superior to the sensitive, and which mode

The Nature and Excellency

rates and governs all the faculties and operations of it : yea, more yet, which from representations sensible deduces many other notions of things altogether unknown to sense, and which the Phantasy is of itself wholly incapable to imagine. For, it understands *Axioms*, or first principles, and that by his own power alone, without recourse to corporeal *species* : and (what is yet more noble and sublime) by a reflex act views *itself*, thinks that it thinks, from thence certainly knowing its own *Existence*, which cannot be either perceived by sense, or imagined by Phantasy. Whereas neither the *Sense*, nor *Imagination* (for of these there are no images extant) can perceive that they perceive, or imagine. To these royal prerogatives of Mans *Rational Soul*, let us subjoyn the native right she hath to the whole *Encyclopaedia* or *Zodiac* of *Arts* and *Sciences*; *Theology*, *Logic*, *Physic*, *Metaphysics*, *Mathematics*, *Algebra*, *Geometry*, *Astronomy*, *Mechanics* : which being all (*Theology* alone excepted) the products or Creatures of Mans *Mind*, sufficiently attest their Author to be an *Agent Spiritual*, admirably *intelligent*, *immaterial*, and therefore *immortal*.

Now if this be true (as most certainly it is) then one of these two *Assumptions*

ons must be so too. Either the *Rational Soul* of Man doth *alone* perform all offices not only of *understanding* and *discourse*, but of *sense* also, and *life*; and so administer the whole ceconomy of Human nature. Or else there are in every individual Man *two* distinct Souls conjoined, and acting together: one, only *Rational*; t'other merely *Sensitive*; that as *Queen* regent, this as *inferior* and *subordinate*.

The FIRST seems to me not a little improbable.

For, (1.) All Acts of the Senses, and animal Motions, as likewise the Passions, are *corporeal*, *divided* and *extended*, to various parts: and therefore the *Rational Soul*, which we conceive to be *incorporeal*, *indivisible* and *finite*, seems incapable to cause or impress those motions *immediately*, or by herself. To me (I confess) it seems Unintelligible, how an incorporeal Agent not infinite, can physically act in, and upon a gross body *immediately*, or without the intervention of a third thing; which though corporeal too, is yet notwithstanding of parts so spirituous, and of a constitution so subtil, as to approach somewhat nearer to the nature of a pure *Spirit*, than solid and ponderous body doth. *Flame*, and

Art. 4.
Life and
Sense de-
pend not
on the Ra-
tional Soul
of Man.



Two distinct Souls

light I acknowledge to be *bodies* ; but yet methinks there is less of *disproportion*, or *disparity* betwixt them and a substance purely spiritual, than is betwixt a pure *Spirit* and a gross, heavy body, such as ours is. And therefore in my weak judgment, it is more conceivable that the *Reasonable Soul* should have some spirituous, and subtile thing as flame, or light is, *viz.* the *Sensitive Soul*, conjoyned with her, to be a convenient *Medium* betwixt herself and the gross body, to receive her immediate influence, and actuate the body according to her will and pleasure : than it is, that she should *immediately* move and actuate the body, betwixt whose nature and her own there is great disparity.

(2) As for that nice and amusing doctrine of the *School-men*, that *in Man the Sensitive Soul is eminently contained in*, and (to use their very term) *as it were absorpt by the Rational* ; so that what is a *Soul* in *Brutes*, becomes a mere *Power* or *quality* in *Man* : this I think (as many other of their superfine distinctions do) sounds like nothing put into hard words. For, how can it be imagined possible, the eternal law of nature should be so far violated, as that a *substance* should be changed into an *accident*? that the *Sensitive*

sitive Soul which is corporeal and extense, and which they themselves allow to be actually existent in the body, before the infusion of the *Rational*; should upon accession of the *Rational*, lose its former essence, and degenerate into a naked *Quality*? This is (I profess) a Mystery much above my comprehension.

(3) If it be affirmed, that the *Rational* Soul doth, at her entrance into the body, introduce *life* also, and *sense*; and so there is no need of any other Principle of life and sense, where she is: then must it be granted, that *Man* doth not generate a *Man animated*, or endowed with life and sense; but only an inform body, or rude mass of flesh. And how absurd that would be, I leave to your judgment.

These Reasons discovering the improbability of the *first Assumption*; what can remain to hinder us from embracing the **OTHER**, viz. that there are **in** every individual *Man*, *two distinct Souls*, coexistent, and conjoin'd; one by which he is made a *Reasonable creature*, another by which he becomes also a *living, and Sensitive one*? Especially since the truth of this seems sufficiently evident even from that *luxuraxia*, or *civil war* too frequently hapning betwixt these **twins**, which every *Man* sometimes feels

Art. 5.
And there-
fore he
seems to
have also a
Sensitive
Soul.

in his own breast, and whereof the holy *Apostle* himself so sadly complain'd. For, this intestine War, seeing it cannot arise from one and the same thing possessed with affections mutually repugnant, and inclining us two contrary waies at once ; argues a *Duumvirate* of Rulers reciprocally clashing, and contending for superiority ; and such too that are as remote in their Natures, as different in the modes of their Subsistence.

Art. 6. Upon this War depend all the *Passions* that there by which the restless Mind of Man is so variously, and many times also violently agitated, to his almost perpetual disquiet and vexation : and upon the success of it depends all the *happiness*, or misery of not only his present life, but that which is to come. To enquire therefore a while into the *Grounds* and *Reasons* of this fatal discord ; will be neither loss of time, nor digression from our purpose.

Art. 7. That Man then is endowed, as with two distinct faculties of *Knowing*, viz. *Understanding*, and *Imagination* ; that proper to his *Rational*, this to his *Sensitive* Soul : so likewise with a twofold *Appetite*, viz. *Will*, which proceeding from Intellect, is immediate attendant of the *Rational* Soul ; and *appetite Sensitive* which

The Causes
of that
War.

which cohering to the Imagination, is as it were the factor or procurer to the Corporeal Soul: is the common doctrine of *Plato* and *Aristotle*, to this day read and asserted in the Schools; nor ought it to be rejected. But then it must not be so understood as if the *Rational Soul herself*, which seems to be immaterial, and consequently exempt from passion; were upon every appulse of *good* or *evil* objects, subject to all the turbulent affections of *desire* or *aversation*: for, this would be manifestly repugnant to the excellency of her *spiritual* nature, and inconsistent with her dignity and *superintendency* over the inferiour Powers. *Affections* she hath indeed of her own, such as are competent and proper to her semi-divine Essence. It is not to be doubted, but that in the contemplation of *true* and *good*, and chiefly of what is supremely both *true* and *good*, the *Deity*; as likewise in works of *benificence*, in the *cognition* of things by their causes, in the exercises of her *habits* aswell the *contemplative*, as the *practical*; and in all other her proper acts, the Reasonable Soul feels in herself a very great *Complacency*; as on the contrary, the want of these doth affect her with as great *Displeasure*. Nor is it to be doubted, but our love of God,

and all other real goods ; and our detestation of vices and vicious Men ; as also all other pure and simple affects arising and continuing without *perturbation* or disquiet, belong only to the *Reasonable Soul*, which (to use the elegant simile of *Plato*) seated in a higher sphere of impossibility, like the top of mount *Olympus*, enjoys perpetual serenity : looking down the while upon all tumults, commotions and disorders hapning in the inferior part of Man ; as that doth upon the clouds, winds, thunders, and other tempests raised in the air below it. But as for all *vehement* affections, or *perturbations* of the *Mind*, by which it is usually commoved, and inclined to this or that side, in for prosecution of good, or avoidance of evil, these certainly ought all to be ascribed to the *Corporeal Soul* ; and seem to have their original in the seat of the *Imagination*, probably the middle of the brain. Nevertheless, for that the *Intellect*, as it reviews all Phantasms formed by imagination, and at pleasure regulates and disposes them ; so it not only perceives all concupiscences, and tempests of passions nedd to be stirr'd up in the imagination, but also (while it freely exerciseth its native power and jurisdiction) moderates, governs, and gives law

law to them: for these reasons, when the Rational Soul approves some, and rejects others; raiseth some, and composeth others of those passions, and directs them to right ends; she may also be said, by such her dictates, to exercise acts of *Will*, as Arbiter, and to will or nill those things, which the *Sensitive Appetite* desires or abhors by her permission or command.

But yet this empire of the Rational Soul is not so absolute over the *Sensitive*, when this proceeds to *Appetite*, as when it is employed about the discernment and *Knowledge* of sensible objects. For, the *Sensitive* being much nearer allied to the *body*, and immediate Guardian therof; is by that affinity and relation obliged to addict itself altogether to the gratification, welfare and conservation of the same. And that this province may be more grateful and agreeable to so delicate a *Governess*, she is continually courted and presented by all the *Senses* with variety of blandishments and tempting delights. So that charmed by those powerful enchantments of sensible objects, and entirely taken up with care of the body, and in that respect prone to pursue pleasures; she too often proves deaf to the voice of *Reason*, advising the contrary, and refuses

Art. 8. Wherein sometimes the *Sensitive* appetite prevails.

to

to be diverted from her sensual to nobler affections.

Yea sometimes grown weary of subjection, she takes occasion to cast off her yoke of allegiance, and like a proud and insolent Rebel, aspires to unbounded license and dominion. And then, then it is we feel those *Twins* strugling within us, that intestine War betwixt the *Flesh* and the *Spirit*, that dire conflict of the *Sensitive Appetite* with *Reason*; which distracts one Man into two Duellists, and which ceaseth not, till one of the Combatants hath overcome and brought the other to submission. And (what is yet more deplorable) the event of this combat is often so unhappy, that the *nobler* part is subdued and led captive by the *ignoble*: the forces of *sensual* allurements then proving too strong for all the guards of *Reason*, though assisted by the auxiliary troops of *Moral* precepts, and the sacred institutes of *Religion*. When the divine *Politie* of the Rational Soul being subverted, the whole unhappy Man is furiously carried away to serve the brutish lusts of the insolent Usurper, and augment the triumphs of libidinous carnality: which degrades him from the dignity of his nature, and caffating all his royal prerogatives, debases him to a parity with

with beasts, if not below them ; for, *Reason* once debauch'd so as to become *brutal*, leads to all sorts of *excess* ; whereof beasts are seldom guilty.

Yet this is not always the issue of the War. Sometimes it happens that the victory falls to the right side ; and the *Princess* over-powering the *Rebel*, reduces her to due submission and conformity. Nay sometimes *Reason*, after she hath been long held captive, breaks off her fetters ; and remembering her native Sovereignty, grows conscious and ashamed of her former lapses : and thereupon with fresh courage and vigour renewing the conflict, vanquishes and deposses the *Sensitive Soul* with all its legions of lusts, and gloriously re-establishes herself in the throne. Yea more, at once to secure her empire for the future, and expiate the faults of her male-administration in times past ; she by bitter remorse, severe contrition, and sharp penance, punishes herself, and humbles her traitorous Enemy the *Flesh*. And as the War itself, so this act of *Conscience*, this *self-chastising affection*, being proper to *Man* alone ; doth clearly shew, *that in Man there are either two Souls, one subordinate to the other ; or two parts of the same Soul, one opposing the other, and contending about*

Art. 9.
And sometimes the Rational.

about the government of him and his affections. But which of these two consequents is most likely to be true, you may have already collected from my discourse precedent.

It remains then, that I give you some account of the Opinions, or rather *Conjectures* of Men (for they can be no other) which seem to me most probable, concerning the *Origin* of the *Reasonable Soul*; concerning the principle *seat* of it in the body; concerning its *connexion* with the *Sensitive Soul*; and concerning the manner of its *Understanding*.

Art. 10.
That the
Rational
Soul is crea-
ted imme-
diately by
God.

For the *First*, if the Rational Soul be a *pure Spirit*. i. e. a simple or incompound substance; as I have already shewn her proper *acts*, *affections* and *objects* seem to infer, and as most wise Men, ancient and modern, Ethnics and Christians, Philosophers and Theologues have unanimously held her to be: and if it seem inconsistent with the purity and simplicity of such a Being, to be generated by the Parents, who are compound Beings, as reason teacheth us it is: granting this, I say, nothing can remain to divorce me from that common opinion which holds, that she is *created immediately by God, and infused into the body of a human Embryon, so soon as that is organized, formed and prepared to receive her*. For,

For, as to that grand *Objection*, that the *Son* oftentimes most exactly resembles the *Father*, not only in temperament, shape, stature, features, and all other things discernable in the body; but in disposition also, wit, affections, and the rest of the Animal faculties: and therefore it must needs be, that the Father begets the Rational Soul, as well as the body: it is easy to detect the weakness thereof, in the violence of the illation. Since all those endowments and faculties wherein the chief similitude doth consist, proceed immediately from the *Corporeal Soul*, which I grant to be indeed *Ex traduce*, or propagated by the Father; but not the *Rational*, which is of Divine Original.

For the *Second*, viz. the *Rational Souls* chief seat or Mansion in the body, tho' I cannot conceive how, or in what manner an *immaterial* can reside in a *material*, because I can have no representation or idea in my mind of any such thing: yet nevertheless when I consider that all impressions of sensible objects, whereof we are any ways conscious, are carried immediately to the *Imagination*; and that there likewise all Appetites, or spontaneous conceptions and intentions of actions are excited: I am very apt to judge the

Art. 11. The resemblance betwixt Father and Son, imput-
ted to the Sensitive Soul.

Art. 13. The Rational Soul seated in that part of the brain which serves to Imagination.

The Connexion of the Rational

the *Imagination* to be the *Escorial*, or imperial palace of the *Rational Soul*, where she may most conveniently both receive all intelligences, from her Emisfaries the sences, and give forth orders for government of the whole state of Man. That the whole *Corporeal Soul* should be possessed by the *Rational*, seems neither *competent* to her *Spiritual* nature, which is above Extensibility; nor *necessary* to her Empire over all: no more than it is necessary for a King to be present in all parts of his dominions at the same time. And if she be as it were in throne in any one part thereof; what part so convenient, so advantagious as the *Phantasy*, where she may immediately be informed of all occurrents in the whole body, and whence she may issue forth mandates for all she would have done by the whole, or any member thereof? I think therefore, I may affirm it to be probable, that this *Queen* of the Isle of Man hath her *Court*, and *Tribunal* in the noblest part of the *Sensitive Soul*, the *Imagination*, made up of a select assembly of the most subtil Spirits Animal, and placed in the middle of the Brain. As for the *Conarion*, or *Glandula pinealis* seated near the center of the Brain, wherein *Monsieur Des Cartes* took such pains

pains to lodge this Celestial Ghest; all our most curious Anatomists will demonstrate that *Glandule* to be ordained for another, and that a far less noble use, which here I need not mention.

For the *Third*, to wit, what *obligeth* the *Rational Soul* to continue resident in the *Imagination* during this life; truly I can-
not think either that she is capable of, or
that she needs any other *ligament* or *tye*,
than the infringible Law of Nature, or *Will*
of her Divine *Creator*: who makes and
destines her to reside in the Body of Man,
to be his *Forma informans*; and gives her
therefore a strong *inclination* to inhabit
that her Inn or Lodging; ordaining her to
have a certain *dependence*, as to her opera-
tion, upon the *Phantasy*, so that without the
help and subservency thereof, she can know
or understand little, or nothing at all.
For, it is from the *Imagination* alone that
she takes all the representations of things,
and the fundamental *Ideas*, upon which
she afterward builds up all her Science, all
her Wisdom. And therefore though the
Mind of one Man understands more, and
reasoneth better than another; it doth not
thence follow, that their *Rational Souls* are
unequal in their natural capacity of under-
standing and discourse: because the dis-
parity proceeds immediately from diffe-
rence

Art. 13. And there
connexed to
the *Sensi-*
tive by the
will of her
Creator.

rence of *Imagination*, mediately and principally from the various dispositions of the *Brain*. For, when the Animal Spirits, being either of themselves less pure, subtil and active than is requisite, or hinder'd in their expansions and motions, are not able duly to irradiate and actuate the *Brain* affected with some Distemper, or originally formed amiss: in such case, the *Phantasms* created in the *Imagination*, must be either deficient, or distorted; and the *Intellect* being obliged to judge of them accordingly, must be misinformed. Hence it often happens, that by reason of some Wound, Contusion, or other great Hurt done to the *Brain*, Men who formerly were of acute Wit, and excellent Understanding, are more or less deprived of those noble Faculties, and degenerate into mere Fools or Ideots. For, the acquiring, and losing the *habit* of Intellection and Ratiocination, depends totally upon the *Brain* and *Imagination*, the corporeal Subject thereof: but the *Intellect* it self, since it hath no parts, cannot be perfected by parts; being from the beginning, and of its own nature, a full and perfect power of Understanding. Nor doth it, by accession of any whatever Habit, understand more; but is it self rather a *Habit always comparated to understand*. And in truth

the

the principal Function of the human Intellect seems to be this, that it be of its own nature merely *intelligent*, that is knowing things, not by ratiocination, but by *simple intuition*. But during its confinement within the body, it is surrounded with that darkness, that it doth not simply, nakedly, and it were by way of intuition perceive all things which it understands; but attains to most of its knowledge by *reasoning*, that is, successively, and by proceeding as it were by degrees. If therefore the *Organ* or instrument, by the help of which the Intellect is obliged to ratiocinate, or gradually to attain to the knowledge of things, be unfit, or out of tune: no wonder if it be not able to make good Musick thereupon.

Concerning the *Fourth* and last thing therefore, namely the *Manner* how this Unintelligible *Intellect* of man comes to know, speculate and judge of all Phantasms or images pourtraid in the Imagination: I can much more easily guess what it is not, than what it is. I am not inclined to espouse their conceit, who tell us, that the Rational Soul sitting in the brain, somewhere near the original of the nerves belonging to the Senses (as a Spider sits watching in the centre of her net) and feeling all strokes made upon them by the

Art. 14.
Where
how she
exerciseth
her facul-
ty of judg-
ing of the
images
of things
formed in
the Imagi-
nation,
seems to be
inexplicable.

Species of sensible objects, distinguishes and judges of their several qualities and properties, by the different *modes* of their impressions. Because, the supposition of a *percussion*, or stroke to be made by a *Corporeal* image, is manifestly repugnant to a Faculty *incorporeal*. But whether or no I ought to acquiesce in that *other* opinion delivered, and maintained by a whole Army of Contemplative Men, *viz.* That the Intellect knows and discerns things by *simple Intuition*, i. e. by beholding their Images represented in the Phantasy, as we see our Faces represented in a Mirror or Looking-glass ; truly I am yet to learn from wiser Heads than mine. For, though I admire the subtily of the concept, and love not to be immodestly Sceptical, especially in matters that transcend my narrow comprehension : yet, to speak ingenuously, I as little understand how *Intuition* can be ascribed to an *immaterial*, that hath no *Eyes* ; as I do how *Feeling* or *strokes* can be ascribed to a thing that cannot be *touched*. Nevertheless I will not point blank deny this latter Opinion to be true, only because I cannot perceive the Competency of such an act as *Intuition* to the *incorporeal* Soul of Man : for, that were to make my scanty Reason the measure of Truth ; and to confide more in my own dulness.

dulness, than in the admired perspicacity of so many eminent Wits preceding me. Wherefore having confess'd my Ignorance, I refer the matter to your arbitration; allowing you as much time as you shall think fit, seriously to consider the same; and in the interim contentedly suspending my curiosity, which hath too often perplexed me. For, hitherto could I never drive it into my head, how those terms of *infusion*, *connexion*, and *intuition*, can be intelligibly applied to a *spiritual*, or incompound essence, such as we conceive the Reasonable Soul to be; and if I have used them in this Discourse, it was rather because I could think of none *less improper*, than because I approved them as *adequate* to the notions to which they are vulgarly accommodated. Besides, I hold it extremely difficult, not to speak some *Nonsense*, when we adventure to treat of the nature of *Spirits*, whereof we understand so little: and you (I presume) will rather pity, than condemn a Man for stumbling in the *dark*. But I have too long detain'd you upon *Preliminaries*: and therefore deprecating your impatience, invite you now from the Porch into the little *Theatre of the Passions*, which I design'd to erect more for your diversion, than study. ¶

S E C T. IV.

Of the Passions of the Mind in general.

Taking it for granted then, from the reasons precedent, that in Man, besides the Rational Soul, by which he becomes a Reasonable creature, there is also a Sensitive one, by which he is made a living and Sensitive creature; and that this later being merely *Corporeal*, and *coextens* to the body it animates, is by the law of its nature subject to various *Mutations*: I come in the next place to consider what are the most remarkable of those Mutations, and the *Causes* whence they usually arise; as likewise the principal effects of them upon the *body* and *mind* of man.

Obvious it is to every mans notice, that Art. I. there is a *twofold state* or condition of his state of the *Sensitive Soul*; one of *quiet* and *tranquillity*; another of *disquiet* and *perturbation*: every man living finding his spirit sometimes calm and serene, sometimes agitated and ruffled more or less by the winds and

A two-fold Sensitive Soul; viz. of *tranquillity*.

and tempests of passions raised within him.

In the state of *Tranquillity*, it seems probable that the whole *Corporeal Soul* being coextens to the whole body inshrinining it (as the body is to the skin investing it) doth at the same time both inliven all parts with the vital flame of the blood, to that end carried in a perpetual round (as the vulgar conceive the Sun to be unceasantly moved round about the Earth, to illuminate and warm all parts of it) and irradiate and invigorate them with a continual supply of Animal spirits, for the offices of Sense and Motion. And this *Halcyon* state certainly is the only fair weather we enjoy within the region of our breast, and the best part of human life.

On the contrary, in the state of *Perturbation*, all that excellent *Oeconomy* is more or less discomposed. Then it seems that the same frail soul is so strongly shock'd and commoved, that not only her *vital* part, the blood, the calm and equal circulation being interrupted, is forced to undergo irregular floods and ebbs, and other violent fluctuations; but the *Animal spirits* also, impelled to and fro in a tumultuous manner, cause great disorders in the functions of sense and motion; yea

Art. 2.
And Per-
turbation.

more, by their exorbitant manner of influx into the Nerves of the Heart and Lungs, they move them irregularly, and so contribute to render the Course of the Blood yet more unequal. Nor doth the Tempest stop here; it extends sometimes also to other *Humors* of the Body, to the solid parts and members of it, and even to the discomposure of the *Reasonable Soul* her self.

Art. 3.
The first,
most obser-
vable in
sleep, and
when ob-
jects ap-
pear indif-
ferent.

The *Tranquility* of the Sensitive Soul is easily observable in *sleep*, when the Spirits are bound up, or at least at rest; and very often also when we are *awake*, namely, whensoever the Objects affecting the Sense, or created in the imagination, appear to import neither *good*, nor *evil* to *us*, and we are no further concerned than barely to apprehend and know them. For, then they smoothly and calmly slide into the common sensory and imagination, and soon pass away without any the least disquiet or commotion of the appetite.

Art. 14.
The other,
manifest in
all Passions.

The *Perturbation* of it is as easily manifest in all the *passions*, which are the consequents of *desire*, or of *aversation*. For when any object is represented under the appearance of good or evil to *us* in particular; instantly the Sensitive Soul is moved to embrace, or avoid it; and employs not only the Animal Spirits, her Emissaries,

ries, but the blood also, and other humors universally diffused through the body, and even the solid parts too, as instruments to effect her design. More plainly; when the Imagination conceives any thing to be embraced as good, or avoided as evil; presently by the spirits residing in the brain, and ranged as it were into order, the Appetite is formed: and then the impression being transmitted to the Heart, according as that is contracted or dilated, the blood is impelled and forced to various fluctuations, and irregular motions: and thence the Appetite being by instinct transmitted to the nerves ordained for that use, they cause motions of the solid parts respective thereunto. And this we may conjecture to be the *order of motions* excited successively in the phantasy, spirits, blood and solid parts, in every Passion of the mind of what sort soever. Nor can it indeed sink into my dull head, by what other means of mutual intercourse, besides such a quick transmission of spirits first from the brain into the *Præcordia*, and thence back again to the brain, by nerves to that end extended betwixt those sources of life and sense, the great and speedy *commerce* in all passions observed to be maintained between them, can be effected.

Art. 5.
That in the
state of
Perturbati-
on, the *Sen-*
sitive Soul
varieth her
Gestures, by
Contraction
or *Expansi-*
on.

But however this admirable Commerce may be otherwise explained, it is lawful for us to conceive, that the *Sensitive Soul*, when put into this state of *perturbation*, doth strangely vary her *Postures*, according to the diversity of motions caused in her: and though that diversity be very great, yet that in all perturbations whatever, she is more or less *amplified*, so as to swell beyond her ordinary bounds; or more or less *contracted* within herself, so as to be less *extense* or *diffused*, than usually she is at other times, in her state of *tranquillity*: as will be exemplified in all the passions we design particularly to describe. Mean while it is observable, that sometimes she being affected with *Joy* or *Pride*, and as it were exulting above measure doth advance and *expand* her self, as if she strove to be greater, and to stretch her gandure beyond the narrow limits of the body. Whereupon the *Animal Spirits* being respectively commoved in the brain, enlarge the sphere of their irradiation, and by a more abundant influx vigorously agitate the *Præcordia* or *vital parts*, so forcing the *blood* to flow more copiously into all parts, and to diffuse it self more freely and speedily through the whole body. On the *contrary*, sometimes being surprised with *grief*, or *fear*, she contracts her self into a narrower compass;

compass; so that shrunk up to a scantling less than her usual circuit of emanation, she becomes of too small a size vigorously to actuate the body as she ought. Whence the *Animal faculties* drooping as it were, perform their actions either slowly and weakly, or perversely: and the *Præcordia* wanting their due influx of spirits, almost flagg, suffering the *blood* to remain in their conduits longer than it ought, even to danger of stagnation, and consequently of sudden death. These two contrary Motions therefore of *Contraction* and *Expansion*, I suppose to be the two *General* ones, to which all the various *Postures* of the *Sensitive Soul*, when she is perturbed, may be commodiously referr'd: it seeming to me, considering her to be exactly like a *Flame*, and obnoxious to the like accidental mutations, that she is not naturally capable of other besides these; and that how great soever the variety of such her *Mutations* may be in the vast diversity of *Passions*, yet they are all but several degrees, and divers *modes* of either her *Extension*, or *Contraction*.

This being then supposed, I proceed to the first and *General Causes* of all Passions. Where I observe first, (what was only hinted a little afore) that it is not the simple representation of *good* or *evil* in any object, particular.

Art. 6.
We are not moved to Passion, by Good or Evil, but only when we conceive the same to concern our selves in particular.

object, how great soever it be, that is sufficient to raise Commotion in the sensitive Soul ; for, we usually, without perturbation, behold the prosperous or adverse events befalling *other* Men no waies related to us : and therefore it is further required to the moving our affections, that the good or evil apprehended, be by us conceived to concern *ourselves* in particular, or our *Friends* at least, and near relations, who in this case are part of our selves. *Secondly*, that even that good or evil wherein a Man conceives himself to be concern'd, is not always apprehended by him under one and the same *ration* or aspect ; but *variously*, aswell in respect of the *object* itself, as of the *Subject* to which it doth more peculiarly and immediately appertain. Of the divers rations under which one and the same *object*, good or evil, may be apprehended by one and the same Man respectively to the various *circumstances* thereof ; we shall more opportunely speak anon. And as for those that respect the *Subject*, or Man *apprehending* ; it is worthy our serious remark.

Art. 7.
All Passions distinguished into *Physical*, *Metaphysical*, and *Moral*.

That all Good or Evil represented to Man, doth concern the *Sensitive* Soul, either as she is *distinct* from the body, and abstract from all relation ; or as she is intimately

timately *conjoyn'd* to the *body*, and interressteth therein ; or finally as she is *subordinate* to the *Rational Soul*. For, though every *Affect* or passion be founded in the *Corporeal Soul*, yet it always respects the good or evil of one or other of these three subjects ; and is first raised on the behalf of this, that, or the other. Wherefore according to this triple relation of the *Sensitive Soul*, all Passions incident thereto, may be said to be either *Physical*, or *Metaphysical*, or *Moral* : of which in their order.

1. Passions meerly *Physical*, or which properly belong to the *Sensitive Soul alone*, Art. 8.
What are
passions
Physical. are those natural and occult *inclinations* and *aversations* commonly call'd *Sympathies* and *Antipathies*, whereby one Man, more than another, is not only disposed, but even by secret impulse forced to affect, or dislike such or such a person, or thing, without any manifest cause or inducement so to do. Of *Sympathies* betwixt *Persons* there is great variety of Examples, especially in *Lovers* ; among whom many are not allured by that grand bait of the *Sensitive Soul*, *Beauty* ; but strongly attracted, and as it were fascinated by they know not what hidden *Congruity*, or (as the *French* call it) *agreeableness of spirits* : which enchains them

them so firmly to the persons beloved, that notwithstanding the deformities they see and acknowledge to be in them, yea and the contempt they sometimes receive from them, they still doat upon, and with delightful submissions court and adore them. And as for *Antipathies* as well toward *Persons as things*; instances of them also are without number, and many shew themselves at our very Table. Where one Man abhors a *Breast of Mutton*, yet loves the *Shoulder* cut from it; a second swoons at the sight of *Eels*, and yet will feast upon *Lampreys or Congers*; a third abominates *Cheese*, but is pleased with *Milk*; a fourth detests *roasted Pigg*, yet can make a Meal upon *Bacon*. This Man sweats at presence of a *Cat*; that falls into an agony by casting his eye upon a *Frogg or Toad*; an other can never be reconciled to *Oysters*. Nay more, there are who feel themselves ready to faint, if a *Cat* be hidden in some secret place of the room wherein they are, though they suspect no such encountre of their natural enemy, till they are wounded with the invisible darts or emanations from her body. And all these admirable Effects proceed not from any positive Evil or malignity in the things abhorred; for, what's one Mans meat, is an others poyson:

poyson: but only from their *incongruity*, or occult *Enmity* to this, or that particular Sensitive Soul. For if at any time it happens, that the consistence of Animal Spirits that constitute the *lucid* or *Sensitive* part of this Soul, be by the encounter of any object, put into great disorder: she ever after abhors the approach, or *effluvia* of the same. Whereas the *Congruity* of particles proceeding from an object, to the contexture of the Soul, is on the contrary the ground of all her secret *Amities*.

2. Passions *Metaphysical*, or which seem to have their first rise from, and principally to relate to the *Rational* Soul, are those which *Divines* call *devout* and *religious Affections* directed to objects *Supernatural*, and chiefly to *God*. For, when our nobler Soul reflecting upon the excellency and immortality of her nature, aspires by sublime speculations toward her supreme felicity, the contemplation and love of her Creator; and determines her Will to pursue that incomprehensible, because infinite subject of all perfections, which alone can satisfy her understanding with light or knowledge, and her will with love: she doth not only exercise herself in simple and abstracted conceptions, such as are proper

Art. 9.
What *Metaphysical*.

to

to her immaterial essence alone, and conformable to the dignity of the thing she speculates ; but communicates her affects also to the Sensitive Soul, by whose subordinate motions she is obliged to act respectively to her end. And these motions or acts being thus traduced from the superior to the inferior Soul, and thence derived first to the brain and imagination, then to the heart ; produce therein, and so in the blood, the various motions that constitute such Passions, as we observe in our selves, when we are most ardently urged to acts of devotion and piety toward the supremum Being. Whence it is doubtless, that *Divine love, detestation of sin, repentance, hope of Salvation, fear of incensing Divine justice*, and most, if not all other acts (or passions) of devotion are commonly ascribed to the heart : and that not without some reason. For, though I cannot admit the heart to be the Seat of the Passions, as the Aristoteleans unanimously hold it to be, only because of the sensible alterations therein produced in most passions ; since in truth those alterations are rather consequents, than causes of Passions ; and since they are not felt by us in the heart, but only by means of the nerves descending thither from the brain ; as pain

is

is not felt as in the foot, but by intervention of nerves betwixt the foot and the brain ; and as the Stars appear to us as in heaven, by meditation of their light affecting our Optick nerves. So that it is no more necessary the Soul should exercise her functions or receive her passions immediately in the Heart, only because she feels her passions therein ; than it is she should be in Heaven, because she sees the stars to be there ; or in the foot, because pain appears to her to be there. Notwithstanding this I say, yet the adscription of these devout Passions to the *heart*, is not altogether destitute of reason. For, (for instance) when the inferiour Soul is commanded by the Superior, to humble, and as it were to prostrate herself in adoration of the sacred Majesty of God ; instantly both parts thereof, as well the Sensitive, as the Vital, are forced to repress and restrain their wonted emanations or effusions. Whereupon the Animal Spirits being in whole legions withdrawn from ministering to the Imagination and Senses, are by the nerves transmitted in crowds to the heart : which while they closely contract and shut, they cause the blood to remain longer than usual, in the cavities thereof, and by that means keep

, it

it both from being too much kindled in the Lungs, and from being sent from the heart in too great abundance into the rest of the body, and more especially into the brain ; as if Nature itself had instituted, that in sacred passions the blood, or principal seat of life, should be offered up to the Author of life, upon the alter of the heart, while the brain, or seat of reason, is kept serene and clear. Nor is it difficult to a Man praying to Almighty God with fervency of Spirit, to observe in himself, that his blood is more and more arrested and detained within his breast the while ; insomuch that his heart seems to swell, his lungs to be opprest, and he is forced frequently to interrupt his Oraisons with profound sighs, for attraction of fresh aer : as if the reasonable Soul not content to devote herself alone, and pour forth her holy desires to God, laboured to make a libation also of the vital blood, for a propitiatory oblation. So that though the Soul cannot in strictness of truth be said to receive her passions in the heart ; yet since the alterations caused in us by them, are greater and more sensible in the heart, and consequently in the blood, than in any other part of the whole body beside : I am not so ad-
dicted

dicted to vitilization, as to contend about the propriety of those expressions in Scripture, which seem to ascribe all our sacred passions principally to the heart.

3. And as for Passions *Moral*; I refer to their classis all those that are excited in the Sensitive Soul, upon her perception of such good or evil objects as concern her confederate the *Body*, with which she is most intimately conjoyn'd, and upon whose welfare her safety doth necessarily depend. Concerning these in general, it is remarkable, that though the Sensitive Soul hath secret loves and aversations of her own, commonly called (as we have already said) *Sympathies* and *Antipathies*; and though she owes obedience to the commands and dictates of her superior, the Rational Soul: yet being by so strict a ligue, and as it were a conjugal union affianced to the body, she is strongly inclined to prefer the conservation of that her favorite, to all other relations; and accordingly to gratify and indulge it even in those things that are prohibited by religion and reason. So that no wonder if she be affectd with pleasure, or pain, and with all other passions referible to them, for the prosperous or adverse state of the body.

Art. 10.
And what
Moral.

To make this our entrance into the spring-head of all Passions somewhat more lightsome; we are here to recount *two fundamental* verities, both of so conspicuous evidence, I do not remember, I ever heard them contradicted.

Art. 11.
All Passions referred to Pleasure or Pain.

One is, that all *Affects* which external objects can possibly excite in us, in respect of the various modes or manners by which they fall under our notice, may be commodiously referred to two general heads, namely *Pleasure*, and *Pain*. For, whatever is perceived by the Senses, appears to the Soul to be *Good*, or *Evil*, grateful, or offensive; and whatever is offered to her under the appearance of *Good*, or *Grateful*, instantly causeth some certain *Pleasure* in her: as on the contrary, whatever is represented to her as *Evil*, or offensive, as quickly raiseth in her some kind of *Pain*, or trouble: provided (as was before advertised) she apprehend herself to be any way concerned in such good, or evil. So that we cannot but applaud the judgment of *Epicurus* and *Aristotle* in constituting but two kinds of Passions, namely *Pleasure* and *Pain*: the one calling them *ἡδονὴ & ἀγνόη*, *voluptatem & dolorem*; the other naming them *ἡδονὴ & τοπίον*, *voluptatem & molestiam*.

The

The other is, that all the various motions of the Spirits and blood, or of the Sensitive Soul, excited in the various Passions, may likewise be conveniently reduced to two general heads, namely *Contractions*, and *Effusions*; which our Master *Galen*, I remember, terms $\Sigmaυσθας$, $\mathcal{Y} \Deltaιανωσις$: as they are referred to Pain and Pleasure. Because in *Pleasure*, the Soul *dilateth* herself as much as she can that is, she diffuseth the Spirits, as her Emissaries, to meet and receive the *good* represented to her: and in *Pain*, she on the contrary *compresseth* or withdraws herself inward, that is, she recalls the Spirits toward herself, in avoidance of the *Evil* apprehended.

Manifest it is therefore, that all Corporeal Passions have their roots grounded in *Sense*, whereof pleasure and pain are two opposite affects? One, $\pi\alpha\betaος$ $\deltaινειον$, agreeable and *familiar* to nature; the other, $\alpha\lambdaλοτριον$, *alien* and *offensive*.

And that I may, as far as I am able, Art. 13. explain wherein *pleasure* and *displeasure* of *sence* doth consist; I take liberty to suppose, that at first when an object affects the Sensory with soft and smooth touches, or motions, such as are consentaneous to the delicate contexture of the nerves of which the sensory is chiefly composed,

posed, or to the internal motions of the spirits therein residing; it instantly causeth that grateful sense called *delight*: as on the contrary, if the object invade the sensory with asperity, or violence, such as hurts the tender nerves thereof, or hinders the natural motions of the spirits therein; then it produceth that ingrateful sense call'd *displeasure* or *pain*. The impression being thus made by the object upon the Organ of sense, and thence by a certain motion of the spirits resembling the waving of water, carried on to the brain; if it be *pleasant*, it immediately puts the spirits therein reserved, into brisker, but regular motions conformable to their nature and uses; if *displeasing*, it puts them into confusion. If the impression be *light*, the motion thereby caused in the brain, soon decayeth, and vanisheth of itself: if *strong*, the motion is continued from the brain down to the breast, and the heart and blood participate thereof respectively; and so *passion* instantly succeeds. But whether this be the true manner of objects producing pleasure, or displeasure of sense, or not, most evident it is, *that we have, as no conceptions of things without us in the brain, so no passions for them in the heart, but what have their first original from Sense.* Now

Now having in this manner shewn as plainly as I could, (1) What *Mutations* are incident to the Sensitive Soul. (2) What are the most considerable *Causes* of those Mutations. (3) What the most remarkable *Effects* and consequents of them upon the Body and Mind of Man. (4) The *Differences* of Passions respective to the various *Relations* of the Sensitive Soul to the Rational, and to the body. (5) That all passions are referible to *pleasure*, or *pain*. (6) That all *Motions* of the Spirits and blood caused in passions, belong to *Contraction*, or *Effusion*: and, (7) Wherein consist *pleasure* and *displeasure* of Sense: our next work must be to speak.

Art. 14.
A rehearsal
of the
heads
handled in
this Section.

S E C T. V.

Of the Passions in particular.

NOT of all that are incident to the mind of Man, which were extremely difficult, if not altogether impossible for me to do. For, seeing the objects that raise pleasure and displeasure are innumerable; and the various ways or manners by which they affect the Sense,

Art. 11.
Why Men
have not
been able
to observe
all Passions
incident to
the Sensitive
Soul.

and excite motions in the brain, spirits and heart, are equally innumerable: even those Philosophers themselves who have with all possible attention of mind laboured to search out the severall sorts of Passions, have not been able to take notice but of very few, nor to give names to all those neither. Besides, considering of how subtil particles, how fluid and easily moveable a substance, and how delicate a contexture the Sensitive Soul seems to be composed; we may soon conceive her to be subject to greater variety of impressions, commotions, fluctuations, inclinations, alterations and perturbations, than can possibly be observed and distinguished even by the most curious. It may well suffice then to enumerate and describe the most remarkable of her Passions, such as like so many lesser streams, flow from the two general fountains before mentioned, *Pleasure* and *Displeasure* of sense, or motions begun in the sensory, traduced to the brain, and continued to the heart; and that are of a more simple nature.

Art. 2. The Passions best distinguished by having respect to the circumstances of Time.

Which that we may perform with more of order, and less of obscurity; we are to consider that the Passions receiving their most notable diversity from certain

causes.

circumstances of Time, may therefore be most intelligibly distinguished by having respect to the same Circumstances. For, since there are of *Conceptions* three sorts, whereof one is of that which is *present*, which is *sense*; another, of that which is *past*, which is *Remembrance*; and the third of that which is *to come*, which is called *Expectation*: it is manifestly necessary, that the condition of the pleasure or displeasure consequent to conceptions, be diversified, according as the Good or Evil thereby proposed to the Soul, is *present*, or *absent*. For, we are pleased, or displeased even at things past; because the *Memory* reviving, and reviewing their images, sets them before the Soul as present, and she is affected with them no less than if the things themselves were present. So also of things *future*; forasmuch as the Soul by a certain providence pre-occupying the images of things that she conceives to come, looks upon them as really present, and is accordingly pleased or displeased by *Anticipation*: every conception being pleasure, or displeasure *present*. This being presupposed, we proceed to the *Genealogy* of the passions.

When the image of any *new* and *strange* object is presented to the Soul, and gives Art. 3.
Admirati-
on. *her*

her hope of knowing somewhat that she knew not before ; instantly she admireth it, as different from all things she hath already known ; and in the same instant entertains an appetite to know it better, which is called *Curiosity* or desire of Knowledge. And because this *Admiration* may, and most commonly is excited in the Soul before she understands, or considers whether the object be in itself convenient to her or not : therefore it seems to be the *first* of all passions, next after Pleasure and Pain ; and to have no *Contrary* : because when an object perceived by the sense, hath nothing in it of new and strange, we are not at all moved thereby, but consider it indifferently, and without any commotion of the Soul. Common it is, doubtless to Man with *Beasts* ; but with this *difference*, that in *Man* it is always conjoyned with *Curiosity* ; in *Beasts*, not. For when a *Beast* seeth any thing new and strange, he considereth it so far only as to discern whether it be likely to serve his turn, or to hurt him ; and accordingly approacheth nearer to it, or fleeth from it : whereas *Man*, who in most events remembreth in what manner they were caused and begun, looks for the cause and beginning of every thing that ariseth new to him.

Whence

Whence it is manifest, that all natural *Philosophy*, and *Astronomy* owe themselves to this passion : and that ignorance is not more justly reputed the mother of Admiration, than Admiration may be accounted the mother of knowledge ; the degrees whereof among Men, proceed from the degrees of Curiosity. Now this Passion is reducible to *delight*, because *Curiosity* is delight : and so by consequence is *Novelty* too, but especially that novelty from which a Man conceiveth an opinion of *bettering* his own estate, whether that opinion be true or false : for in such case, he stands affected with the hope that all Gamesters have while the Cards are shuffling ; as *Mr. Hobbs* hath judiciously observed.

Nevertheless it seems rather a *calm* than a tempest of the mind. For, in Admiration, whereby the Soul is *fixt* upon the contemplation of an object that appears to her new and strange, and therefore well worthy her highest consideration ; the Animal spirits are indeed suddenly determined, and with great force, partly to that part of the brain, where the image is newly formed, and partly to the Muscles that serve to hold the organs of the external senses in the same posture in which they then are, that so the object

*Ignorance the
Grandmother of
Knowledge.*

Art. 4.
Which
causeth no
commotion
in the
heart and
blood.

ject may be more clearly and distinctly perceived : yet in the *heart* and *blood* there happens little or no commotion or alteration at all. Whereof the reason seems to be this ; that since the Soul at that time, hath for her object, not good or evil, but only the Knowledge of the thing which she admires ; she converts all her power upon the brain alone, wherein all sense is performed, by the help whereof that knowledge is to be acquired. And,

Art. 5. Hence it comes, that *Excess.* of Admiration sometimes induceth a *Stupor*, or dangerous, *Astonishment* ; and where it lasteth long, when *im-*
moderate. that wonderful disease of the brain, which Physicians name *Catalepsis*, whereby a Man is held stiff, motionless, and senseless, as if he were turned into a statue. For it causeth that all the Animal Spirits in the brain are so vehemently employed in contemplating and conserving the image of the object, that their usual influx in other parts of the body is wholly intercepted, nor can they by any means be diverted : whereby all members of the body are held in a rigid posture, inflexible as those of a dead carcass, or of Man killed by Lightning. Of this admirable effect of excessive Admiration, *Nich. Tulpins*, an eminent Physician of *Amsterdam*, hath recorded *ob*
seru.

serv. medic. lib. 1. cap. 22.) a memorable Example in a young Man of our Nation, who violently resenting a sudden and unexpected repulse in his love, and astonished thereat, became as it were congeal'd in the same posture, and continued rigid in his whole body till next day. Immoderate Admiration therefore cannot but be, by fixation of the Spirits, hurtful to health.

After admiration followeth *Esteem*, or *Contempt*, according as the thing appears great and worthy estimation, or of small value and contemptible. For which reason we may esteem or contemn *ourselves* also: from whence arise first the *Passions*, and consequently the *Habits* of *Magnanimity*, or *Pride*; and of *Humility* or *Abjection*. But if the Good that we have a great esteem of in another Man, be extraordinary: then our esteem is increased to *Veneration*; which is the conception we have concerning another, that he hath the *power* to do unto us both *good* and *hurt*, but not the *will* to do us *hurt*; accompanied with an inclination of the Soul to subject our selves to him, and by fear and reverence to purchase his favour. All which is evident in our worship or veneration of God.

That

Art. 7. That these two contrary Passions, Both con-sequents of *Estimation* and *Contempt*, are both *con-Admiration. sequents of Admiration*; is inferrible from hence, that when we do not admire the greatness or smallness of an object, we make neither more nor less of it than reason tells us we ought to do; so that in such case we value or despise it without being concerned therein, that is, without passion. And although it often happens, that *Estimation* is excited by *Love*, and *Contempt* proceeds from *Hatred*; yet that is not universal, nor doth it arise from any other cause but this, that we are more or less prone to consider the greatness or meanness of an object, because we more or less love it.

Art. 8. But though Estimation and Contempt may be referred to any objects whatsoever, yet are they then chiefly observed, when they are referred to *ourselves*, that is, when we put great or small value upon our own *merit*. And then the motions of the Spirits upon which they depend, are so discernible, that they change the very countenance, gestures, walking, and in word all the actions of those who think more haughtily or meanly of themselves than usual. But for *what* may we have a high esteem of ourselves? Truely I can observe but *one* thing that may give us

us just cause of self-estimation ; and that is the *lawful use* of our *free-will*, and the soveraignty we exercise over our Passions. For (as the incomparable *Monsieur des Cartes* most wisely noteth) take away the actions dependent upon our Free-will, and nothing will remain for which we can deserve to be praised or dispraised with reason : and that in truth renders us in some sort like unto God Almighty by making us Lords of ourselves ; provided we do not through carelesness and poorness of Spirit, lose the rights and power that royal prerogative of our nature conferreth upon us. Wherefore I am of the same *Des Cartes* his opinion, that true *Generosity*, which makes a Man measure his own merit by right reason, doth consist only in this ; that he both knowes he hath nothing truly his own, except this free disposition of his Will, nor for which he justly can be commended or blamed, but that he useth that liberty well : and finds in himself a firm and constant purpose still so to do ; that is, never to want will to undertake and perform all things that he shall have judged to be the *better* ; which is *perfectly to follow Virtue*.

Whereas *Pride*, which is a kind of *Tri- Art. 9.
Pride.*
umph of the mind from an high Estimati-
on

Humility.

on of ones self without just cause, expref-
sed chiefly by haughty looks, *ostentation*
in words, and insolency in action ; is a
Vice so unreasonable and absurd, that if
there were no *Adulation* to deceive Men
into a better conceipt of themselves than
they really deserve ; I should number it a-
mong the kinds of *Madness*. But the con-
tagious Air of *Affection* is diffused so
universally, and hath infected the Tongues
of so great a part of Mankind, that even the
most *imperfect* frequently hear themselves
commended and magnified for their very
defects : which gives occasion to persons
of stupid heads, and weak minds, and
consequently of easy belief, to fall into
this Tympany of *Pride* or *false Glory*. A
passion so far different from true *Ge-
nerosity*, that it produceth effects ab-
solutely contrary thereunto. For,
since other Goods, besides the virtuous
Habit of using the liberty of our Wills
according to the dictates of right reason,
as *Wit*, *Beauty*, *Ricke*s, *Honours*, and the
like, are therefore the more esteemed,
because they are *rare*, and cannot be com-
municated to many at once : this makes
Proud Men labour to depress others, while
themselves being inflaved to their own
vicious cupidities, have their Souls unces-
santly agitated by *Hate*, *Jealousie*, or *Anger*.

The

The contrary to Self-estimation, is *Humility*: whereof there are likewise two Sorts; one, *Virtuous* or *Honest*; the other, *Vicious* or base.

Art. 10.
Humility.

The *Virtuous*, which is properly named *Humility*, consisteth only in that Reflexion we make upon the *infirmit*y of our nature, and upon the errors we either have heretofore committed, or may in time to come commit: and maketh us therefore not to prefer ourselves before others, but to think them equally capable of using their freedom of Will, as well as ourselves. Whence it is, that the most *Generous* are also the most *Humble*. For being truely conscious both of their own infirmit, and of their constant purpose to Surmount it, by doing none but virtuous actions, that is, by the right use of the liberty of the Will, they easily perswade themselves, that others also have the same just sentiment, and the same good resolution in themselves; because therein is nothing that depends upon another. Wherefore they never despise any man, and though they often see others to fall into such Errors that discover their weaknes; yet are they still more prone to excuse, than to condemn them, and to believe their faults proceeded rather from want of knowledge and

Humility.

and circumspection, than from defect of an inclination and will to good. So that as on the one side, they think not themselves much *inferior* to those who possess *more* of the goods of Fortune, or exceed them in Wit, learning, beauty, &c. So neither do they on the other, think themselves to be much *Superior* to others, who have *less* of the perfections ; because they look upon such qualities as not worth much consideration, in comparison of that *goodness* of Will, upon which alone they have a just valuation of themselves, and which they suppose that every Man equally hath, or at least may have. This Humility therefore is inseparable from true Generosity : and being well grounded, always produceth *Circumspection* or *Caution*, which is *fear* to attempt any thing rashly.

Art. II.
*Vicious or
Dejection of
Spirit.*

The *Vicious* Humility, which is distinguished by the name of *Dejection* or *Poorness* of Spirit, proceeds likewise from an apprehension of our own infirmity ; but with this *difference*, that a man conceives himself to be so far deprived of the right and use of Free-will, that he cannot but do things against his inclination, and of which he ought afterward to repent ; and believes himself not able to subsist of himself, but to want many things, whose

whose acquisition depends upon another. So it is directly opposite to Generosity or Bravery of mind, and it is commonly observed, that poor and *abject* Spirits are also *Arrogant* and *Vain-glorious*: as the Generous are most modest and humble. For, these are above both the smiles and frowns of Fortune, still calme and serene, as well in adversity as prosperity: but *those* being slaves to Fortune, and wholly guided by her, are puffed up by her favourable gales, and blown down again by her gust. Nor is it a rarity to see Men of this base and servile temper, to descend to shameful submissions, where they either expect some benefit, or fear some evil: and at the same time to carry themselves insolently and contemptuously toward others, from whom they neither hope nor fear any thing. This Ague of the Soul then, being ill grounded, doth so shake a Man with *distrust* of himself, that it uttly cows him, and keeps him from daring to attempt any worthy action, for fear of ill success: which Vice the *Lord Bacon* calls *Restifeness* of mind, and *falling out of love with ones-self*.

There is yet another remarkable Passion that seems to belong to Humility, and that is *Shame*. Which ariseth from an unwary discovery of some *Defect* or infir-

Art. 12.
Shame and
Impudence

mity in us, the remembrance whereof sensibly dejecteth us, and puts us for the most part to the *Blush*, which is its proper Sign. That it is a sort of *Modesty* or diffidence of our selves, is manifest from hence; that when a man thinks so well of himself, as not to imagine another can have just cause to contemn him; he cannot easily be checked by *Shame*: and as the *Good* that is or hath been in us, if considered with respect to the opinion others may conceive of us, doth excite *Glory* in us; so doth the Evil whereof we are conscious, produce *Shame*. And yet it cannot be denied but that in this discouraging Affect there is also some mixture of *Grief* or secret regret, proceeding from apprehension of *Dispraise*: because being ever accompanied with inward displeasure at the defect or fault uncircumspectly discovered, it cools or damps the Spirits, teaching more wariness for the future. The *Contrary* to this, is *Impudence*; which is contempt of *Shame*, yea and oftentimes of *Glory* too. But because there is in us no special motion of the Spirits and Heart, that may excite *Impudence*; it seems to be no *Passion*, but a certain *Vice* opposite to *Shame*, and to *Glory* also, so far forth as they are both good and laudable: as *Ingratitude* is opposed to *Gratitude*, and *Cruelty*

Cruelty to Consideration: And the chief cause of this vicious *insensibility of Honor*, is founded in grievous *contumelies* to which a Man hath been accustomed in former times, and which he by degrees comes to despise, as of no force to hinder his enjoyment of commodities belonging to his body, whereby he measures all *good* and *evil*; thereby freeing himself from many necessities and streights to which honor would have obliged him. This therefore being no Passion, we are not concerned here further to consider it.

But as for *Pride* and *Dejection*; that they are not onely *Vices*, but *Passions* too, is evident enough from the *commotion* of the Spirits and blood that discovers itself outwardly in Men surprised by them upon any new and suddain occasion. The same may be said of *Generosity* also and *Humility*. For, notwithstanding their *Motions* be less quick and conspicuous, and that there seem to be much less of *Convenience* or fellowship betwixt *Virtue* and *Passion*, than between *Passion* and *Vice*; yet no Reason appears, why the same *Motion* that serves to confirm a conception that is *ill* grounded, may not serve likewise to confirm the same conception though it be well grounded. And because *Pride* and *Generosity* consist equally in *Self-esteem*,

Art. 13.
That *Pride*
and its
contrary,
Abjection
of *Spirit*,
are not on-
ly *Vices* but
Passions al-
so.

Dejection.

differing only in the *injustice* and *justice* thereof: they seem to be but one and the same Passion originally excited by a certain motion, not simple, but composed of the motions of *Admiration*, *Joy* and *Love*, as well that love which is conceived for oneself, as that for the thing which makes one to value himself: as on the contrary, the *Motion* that causeth *Humility*, whether it be *Vertuous* or *Vicious*, seems to be composed of the motions of *Admiration*, *Grief*, and *Self-love* mixt with *Hatred* of the *Defects* that give occasion to one to conceive a mean opinion of himself. Now what are the *Motions* of the Spirits or Sensitive Soul, that produce *Admiration* and *Pride*; we have formerly declared: and as to those that are proper to each of the other passions already considered; they remain to be particularly described in their due places. ¶

Art. 14. As *Admiration*, the first of all the Passions, ariseth in the Soul before she hath considered whether the thing represented to her, be good and convenient to her, or not: so after she hath judged it to be *good*, instantly there is raised in her the most agreeable and complacent of all Passions, *Love*; and when she hath conceived the same to be *Evil*, she is as quickly moved to *Hatred*. For *Love* seems to be no thing

thing but a *Propension* of the Soul to that thing which promiseth *pleasure* or good to her: and *Hatred* is nothing but the Souls *Aversation* from that which threatens *Pain* or *Grief*.

By the word *Propension* here used, is to be understood, not *Cupidity* or desire, which is in truth a distinct passion proceeding from love, and always respecting the *future*; but *Will* or consent by which we consider ourselves as *already* joyned to the thing loved, by a certain conception of ourselves to be as it we a part thereof. As on the contrary, in *Aversation* or *Hate*, we consider ourselves as *entirely* *separate* from the thing hated.

According to these two opposite notions, Art. 15.
I should define *Love* to be a *Commotion* of Defined.
the Soul, produced by a *motion* of the *Spir-
its*, which inciteth her to joyn herself, by her
will, to objects that appear convenient and grate-
ful to her: and *Hatred*, to be a *Commotion*
produced by the *spirits*, that inciteth the Soul
to be willing to be separated from objects that
are represented to her as ungrateful and hurt-
ful.

Of *Love* there are made by the Schools Art. 16.
two Sorts, whereof the first is commonly cal-
led *Amor Benevolentiae*, love of *Benevolence*
or *Good-will*, whereby we are incited to
w^lish well to the thing we love: the other, *Amor*
Love, not
well distin-
guished in
to Benevo-
lence and
Concupi-
scence.

Amor Concupiscentiae, which causeth us to desire to enjoy or possess the object loved. But this Distinction, if considered without prejudice, will be found to concern only the Effects of love, not the essence of it. For, so soon as a Man hath in *Will* joyned himself to an object, of what nature soever it be; he is at the same instant carryed toward it by *Benevolence*, or (to speak more plainly) he in will also adjoyns thereunto what things he believeth conduicible to the good thereof: which is one of the principle Effects of love, but doth not infer a different Species of it. And the same object, if it be judged good to be possessed, or to be joyned to the Soul in another manner than by the will alone; is instantly desired: which also ought to be accounted among the more frequent effects of love. Whence I conclude, that *Desire* connexed to *Love*, is *Benevolence*: as connexed with *Hate*, it is *Malevolence* or ill will. I add, that as *Amity* or Friendship seems to be nothing but constancy of *Love*; so *Enmity*, nothing but constancy of *Hatred*.

Arr. 17. If then you seek for a more genuine
 But by the Distinction of *Love*, I know not how bet-
 various de- ter to gratify your Curiosity, than by en-
 grees of teraining it with that delivered by the
 Estimation. most excellent *Monsieur Des Cartes* in his
 Book

Book concerning the *Passions*; which I will thefore faithfully recite. " *Love* " (saith He) may, in my judgment, be " with good reason distinguished by the " several *degrees* of *Esteem* we have of the " thing loved. For, when a Man hath " less esteem for an object, than for him- " self, and yet loves it; his love is no more " but *Simple Propension* or *Benevolence*: " when as much as for himself, 'tis *Amity* or " Friendship; when *greater* than for him- " self, it may be called *Devotion*. By " the *First*, a Flower, a Bird, a Horse, &c. " may be loved. By the *Second*, no Man " of understanding can love any thing but " Men, who are so properly the object of " this passion, that one can hardly be found " so imperfect, but he may be conjoyned " to another in the most perfect bond of " friendship, if that other conceive him- " self to be truely and sincerely beloved " by him, and think him to have a Soul " truely noble and generous. And as for " the last, *Devotion*; indeed the princi- " pal object thereof is *God Almighty*, to- " ward whom there is no man living, who " considers as he ought, the incompre- " hensible perfections of the Divine na- " ture, but must be devote (for, as *Sene-* " *ca, Deum colit, qui novit*) Yet there is a " Devotion also to ones Prince, or Coun-

" try, or City, or to any private person,
 " whom we esteem above ourselves. And
 " the difference betwixt these three sorts
 " of Love, is chiefly manifest from their
 " divers Effects. For when in each of
 " them the Person loving considers him-
 " self as joyned and united to the thing loy-
 " ed; he is always ready to quit or leave
 " the least part of the whole that he makes
 " with the same, to preserve the rest.
 " Whence it comes that in simple *Benevo-*
 " *lence*, the Lover always prefers himself to
 " the thing loved: but on the contrary,
 " in *Devotion* he always prefers the thing
 " loved, so far above himself, that he
 " fears not to dye for the conservation
 " thereof, of which noble Love there
 " have been glorious Examples in Men
 " who have voluntarily exposed them-
 " selves to certain death, for defence of
 " their Prince, or of their City, yea
 " sometimes also for private Persons to
 " whom they had particularly devoted
 " themselves.

Art. 18.
 That there
 are not so
 many di-
 stinct sorts
 of Love, as
 of objects
 to excite it

This distinction being admitted (as in
 my opinion it well deserves to be) there
 will remain no necessity of constituting so
 many distinct sorts of Love, as there are
 various objects to excite it: seeing there
 are many Passions very different among
 themselves, and in respect of their several
 objects

objects, which yet agree in this, that they all participate of Love. For Example, the Passion by which the *Ambitious* is carried on to Glory, the *Avaricious* to riches, the *Drunkard* to wine, the *Libidinous* to women, the *Honest* to his friend, the *Uxorius* to his wife, the good *Father* to his Children, &c. differ very much among themselves, and yet so far resemble each other, that they all participate of *Love*. But the love of the *first four* aimeth at nothing but the possession of their peculiar objects; nor have they indeed any thing of Love for those objects, but only *Desire* mixt with some other special Passions. Whereas the love of a *Parent* to his Children, is so pure, that he desires to obtain nothing at all from them, nor to possess them in any other manner than he doth already, or to bring them to a nearer conjunction with himself; but considering them as parts of himself, seeks their good as his own, yea with greater care than his own, as not fearing to purchase their felicity at the rate of his own undoing. And the Love of an honest Man to his *Friends*, is also of the same perfection. But the Love of a Man to his *Mistress*, commonly distinguished by the name of the *Erotic passion*; is always mixed with desire of *Fruition*.

And

Art. 19.
Hatred less various than Love.

And as for *Hatred*; though that be directly opposed to *Love*: yet cannot it be distinguished into as many different kinds; because the difference betwixt *Evils* from which we are by our will separated, cannot be so well *observed*, as that which is betwixt the *Goods* to which we are by our will *joyned*.

Art. 20.
Desire, always a Consequent of Love.

From what hath here been said concerning *Love*, as distinguishable chiefly by the several degrees of *Estimation* conceived for the thing loved, it may easily be collected that from *Love* ariseth *Cupidity* or *Desire*, whereby the Soul disposed to covet for the time to come, those things which she represent's to herself as convenient and likely to afford her pleasure. Thus we desire not only the presence of an absent good, but also the conservation of the good that is present: yea we desire likewise the absence of *Evil*, aswell that which is already incumbent, as that which we believe possible to come upon us in the future. For in *Cupidity* or *Desire* of any thing whatsoever, which the Soul judges to be wanting to herself; she always looketh forward to the *time to come*.

Art. 21.
But not always a Concomitant of it.

It may be collected also, that though *Desire* cannot be without *Love*, yet *Love* may be without *Desire* of possessing or enjoying,

enjoying the object, otherwise than by the pure embraces of the *will* alone. And this may be confirmed by observation of the different *Motions* of the Soul and Spirits raised in these two Passions, and the divers *symptoms* consequent thereunto. For,

In *Love*, when it is not accompanied either with *Cupidity*, or with vehement *Joy*, or with *Sadness*, but continues pure and simple; the Soul being incited to conjoyn herself in will to objects that appear good and convenient to her, and instantly dilated; the *Animal Spirits* are like lightning dispatched from the brain by the nerves instantly into the Heart; and by their influx render the pulse thereof more strong and vigorous than is usual, and consequently the circulation of the blood more nimble and expedite. Whereupon the blood being more copiously diffused by the arteries, and more particularly those ascending to the brain, carries with it a recruit of vital Spirits newly enkindled: which being there further sublimed or refined, and corroborating the idea or image that the first cogitation hath formed of the thing loved, oblige, and in some sort compel, the Soul to continue fixed upon that cogitation, and continually to indulge the same.

Art. 22. The Motions of the Soul and Spirits in Love, and their Symptoms.

Humility.

same. And herein, if I am not much mistaken, doth the passion of *Love* principally consist. For, they who are affected therewith, have their pulse *equal* (the Spirits that cause it, being immit-
ted into the *Cardiac* nerves with an e-
qual and placid motion) but stronger and
more frequent then ordinary; they feel
a certain agreeable heat diffused in their
breast; they find their brain invigorated
by abundance of the Spirits, and thereby
grow more ingenuous; and in fine
they digest their meat quickly, and per-
form all actions of life readily and with
alacrity. All which may be ascribed to
the free and expedite, but equal *Circu-
lation of the Blood*, caused by a copious
influx of Animal Spirits into the
Heart. Whence we may safely conclude,
that this grateful passion is highly bene-
ficial to all parts of the body, and con-
duceth much to the conservation of
Health; provided it continue within the
bounds of moderation. But if it exceed
them, and break forth into a wild and
furious *desire*; then on the contrary, by
degrees enervating the members, it at
length induceth very great weakness and
decay upon the whole body. For, *Love*
accompanied with vehement desire, doth
so intirely employ the Soul in the consi-
deration

deration of the Object desired, that she retains in the Brain the greatest part of the Spirits, there to represent to her the Image thereof: so that the whole stock of Nerves, and all the Muscles, are defrauded of the Influx of Spirits from the Brain, with which they ought to be continually inspired or invigorated. Whence in process of time the whole *Oeconomy* of Nature is perverted, and an universal *Languor* ensueth.

And in *Cupidity*, whereby the Soul is so effused towards Good or Pleasure represented to her as certainly to come, as that she is suddenly checked and contracted again by reflection upon the *delay* of the same; there occurs this Singular, that it agitateth the Heart more violently, and crouds the Brain with more Legions of Spirits, than any other of all the Passions. For out of *Desire* to obtain what we ardently pursue, the Spirits are most swiftly transmitted from the Brain into all parts of the Body that may any way serve to do the actions requisite to that end; but above all into the Heart; which being thereby dilated and contracted both more strongly and more frequently than in the state of tranquility, quickly forceth up a more abundant supply of Vital Spirits with the Blood into the Brain; as well that

Art. 23.
The Moti-
ons of the
Soul and
Spirits in
desire.

they

Hatred.

they may there conserve and corroborate the Idea of this Desire, as that whole Brigades of them may be from thence dispatched into the Organs of the Senses, and into all Muscles, whose motions may more especially conduce to obtain what is so vehemently desired. And from the Soul's reflexion upon the delay of her Fruition, which she at the same time makes; there ariseth in her a *Solicitude* or trouble, whereby she is checked and *contracted* again, and the Spirits are by intervals retracted toward the Brain. So that the more subtil and spiritual Blood being with the Spirits recalled from the outward parts, the Heart comes to be constringed and streightned, the Circulation of the Blood retarded, and consequently the whole Body left without Spirits and Vigor. Let none therefore admire, if many of those Men whom *Lust*, or *Concupiscence*, *Ambition*, *Avarice*, or any other more fervent *Desire* hath long exercised and enslaved, be by continual *solicitude* of Mind, brought at length into an ill Habit of Body, to Leanness, a defect of Nutrition, Melancholy, the Scurvy, Consumption, and other incurable Diseases. Nor are you after this so clear manifestation of the great disparity betwixt the Motions and necessary

sary Consequents of *Love* when *pure* and *simple*, and those of *Love* commixt with *Cupidity* or ardent Desire of enjoyment ; longer to doubt, but that *Love* and *Desire* are Passions essentially *different* ; notwithstanding it be true, that the *Later* is always dependent upon the *Former*.

And as for the Motions of the Spirits and Blood in that anxious Affect of the Mind, *Hatred*, which is directly opposed to *Love*, evident it is, that when the Soul is moved to withdraw herself from any Object that appears to threaten *Evil* or *Pain*, instantly the Spirits are retracted inwards to the Brain, and principally to that part of it which is the Instrument or Mint of Imagination ; there to corroborate the Idea of *Hatred*, which the first thought hath formed of the ungrateful Object ; and to dispose the Soul to Sentiments full of bitterness and detestation : So that the while, very few of them, and those too inordinately and by unequal Impulses, are transmitted into the Heart, by the *Pathetick* Nerves. And from this offensive *Contraction* of the whole Sensitive Soul, and as it were compression of the Animal Spirits, and subsequent destitution of the Heart, it comes, that in this sour Passion always the Pulse is made *weak* and *unequal*, and oftentimes

Art. 24. The Motions of the Spirits and Blood in Hatred.

Hatred.

tentimes frequent and *creeping*; that cold, mixt with a certain pricking heat not easy to be described, but sensibly injurious to the vital parts, and repugnant to their regular motions, is felt within the Breast; and that even the Stomach itself, diverted from its Office of Concoction, nauseateth the Meats it had received, and strives to reject them by Vomit. Which often happens upon sight of an odious and abominable Object. Now all these evil effects of *Hate*, give indisputable evidence, that it can never be either grateful to the Mind, or beneficial to the Motions of Life, upon which Health so nearly depends: and this, because *Hate* always hath *Sadness* for its Concomitant; and because by diversion of the Animal Spirits, partly to assist the Imagination, partly to move the Members for avoidance of the hated Object, it defrauds the Blood of its due Supplies of Spirits and Fewel, retards the Motion and equal distribution of it, and by that means destroys Concoction, incrassates the Humors, heaps up Melancholy, and by degrees brings the whole Body to Poverty and Leanness. Moreover, sometimes this disagreeable Passion is exalted to *Anger*, whereby the Soul, offended with the Evil or wrong she hath suffered, at first

Contracts

Contracts herself, and by and by with vehemency springs back again to her natural posture of Coextension with the whole body, as if she strove to break out into revenge: and then it is that the spirits are in a tumultuous manner, and impetuously hurried hither and thither, now from the brain to the heart, then back again from the heart to the brain; and so there follow from these contrary motions alternately reciprocated, as well a violent agitation, palpitation, burning and anxiety of the heart; as a diffusion of the blood, distension of the veins, redness of the face, and sparkling of the eyes, together with a distortion of the mouth (such as may be observed in great indignation, and seems composed of laughter and weeping mixt together) grinding of the teeth, and other symptoms of *Anger* and fury. It is not then without reason Physicians advise Men to decline this passion, as a powerful enemy to health in all but such as are of a cold, dull, and phlegmatic temperament; because it inflames first the spirits, then the blood, and when violent, it puts us into fevers, and other acute distempers, by accension of choler, and confusion of humors. And I could furnish you with examples of some whom this short

fury hath fired into perpetual *madness*, of others whom it hath fell'd with *Apoplexies*, others whom it hath thrown into *Epilepsies*, rack'd with *Convulsions*, unnerved with *Palseys*, disjoyned with the *Gout*, shook with *tremblings*, and the like: but that the books of *Physicians* are full of them.

Art. 25.
Hate al-
ways ac-
compani-
ed with
Sadness.

Here before we proceed to other consequent Passions, it is fit to make a short reflexion upon *Hatred*, that I may verify what was only hinted in the precedent enumeration of the evil *Effects* thereof; *viz.* that it is ever accompanied with *Sadness*. Concerning this therefore I reason thus. Forasmuch as *Evil*, the proper object of *Hate*, is nothing but a *Privation*; and that we can have no conception thereof without some real *Subject* wherein we apprehend it to be; and that there is in nature nothing real which hath not some *goodness* in it: it follows of necessity, that *Hatred*, which withdraws us from some *Evil*, doth at the same time remove us also from some *Good* to which the same is conjoyn'd. And since the *Privation* of this *Good*, is represented to the Soul as a *Defect* or want belonging to her: it instantly affecteth her with *sorrow*. For Example; the *Hate* that alienateth us from the evil manners of a Man with whom formerly

formerly we have been acquainted, separates us likewise from his *Conversation*, wherein we might find something of **Good**: and to be deprived of that Good, is matter of regret and *Sorrow*. So in all other Hatred, we may soon observe some cause of *Sorrow*. ¶

To the excitement of *Desire* in the Soul, it is sufficient that she conceive the ^{Art. 25.} *Hope* and *Fear*. acquisition of the Good, or avoidance of the Evil represented to her as to come, to be *possible*; but if she further consider whether it be *Easy* or *Difficult* for her to obtain her end; and there occur to her more reasons for the facility: then there succeeds that gentle *Effusion* or Tendency of the Soul toward the good desired, which is called *Hope* or *Expectation of good to come*. Whereas on the contrary, if the greater weight be found in the other Scale, and she apprehended the thing desired, to be *Difficult*; she is immediately *Contracted*, and cool'd with that ungrateful Passion, *Fear*, which is *expectation of Evil to come*. And as *Hope* exalted to the highest degree, is changed into *Trust*, *Confidence* or *Security*: So on the contrary, *Fear* in extremity becomes *Desperation*. Again, if this Contraction of the Soul by *Fear*, be sudden and profound, and the Evil expected very great; then

is the passion called *Terror, Dread and Consternation*, which sometimes is so violent, as to cause *Exanimation* or sudden Death.

Art. 27.
Pusillanimity and
Courage.

If the Soul, upon apprehension that the Good desired, is not indeed absolutely impossible, but highly difficult for her to obtain; or the Evil feared, is not altogether impossible, yet extremely hard to be avoided; *persist* in her *Contraction*: she is daunted or cowd into that ignoble weakness called *Pusillanimity* or *Cowardise*. But if after her *Contraction* at first, she exerting her strength, *spring* forth as it were, and with vehemency *dilate* herself, to surmount her fear, and overcome the difficulties apprehended: then is she reanimated as it were, or fortified with the noblest of all Passions, *Courage* or *Boldness*, or *Bravery of Mind*, which makes her to contemn all obstacles to her attainment of her end, whether it be the acquisition of good, or declination of Evil; and which (when it is not a habit or natural inclination) seems to be an *ardor* or *flashing* of the Sensitive Soul, disposing her to act vigorously, and without fear, toward the vanquishing of difficulties that stand betwixt her and the scope she aims at.

And of this Animosity, *Emulation* is a species, whereby the Soul is disposed to

at-

attempt or enterprise difficult things, Art. 28.
Emulation,
a species of
*Magnanimi-
ty.* which she hopes will succeed happily to her, because she observes them to do so to others. But then it is to be distinguished from simple *Animosity* by two proprieties. Whereof *One* is, that it hath not only an internal Cause, viz. such a disposition of the spirits and body, that Desire and Hope may have greater power in impelling the blood in abundance to the heart, than Fear or Despair can have in hindering that motion: but also an external Cause, namely, the *Example* of others who have been prosperous in the like attempts, which creates a belief in us, that we also shall be able to conquer the difficulties occurring as well as those others have done. The *Other*, this; that *Emulation* is ever accompanied with secret *Grief*, which ariseth from seeing ourselves exceeded or excelled by our concurrents. But simple *Animosity* wants both Example for incitement, and Grief for alloy. But both these passions equally depend upon Hope of good success. For,

Though the object of *Audacity* be difficulty, yet to animate us to contend bravely with that difficulty, we must be possessed with a strong *hope*, or certain belief, that we shall at length attain our

Art. 29.
*Confidence
and De-
spair.*

end. Yet this *end* is not the same thing with that *object*; for, there cannot be both *Creatitude* and *Despair* of the same thing at the same time. So when the Roman *Decii* rushed into the thickest troops of their enemies, and ran to certain death; the *object* of their daring was the difficulty of conserving their lives in that action, for which difficulty they had nothing but Desperation, being resolved certainly to dye: but their *End* was, either by their example to inspire courage into the Roman Army, and by them to obtain the victory they hoped; or to acquire posthumous Glory, whereof they were certain. If therefore even in this action that was in itself desperate, *Courage* were grounded upon *Hope*; we may well conclude, that it is always so.

^{Art. 30.} *Donbtuig.* From the reasons we have alledged of *Hope* and *Fear*, it is evident, that we may have those contrary passions excited in us, though the *Event* of the thing expected no way depend upon our selves. But when we proceed to consider the *Event* as altogether, or for the most part depending upon our own counsel, and perceive a difficulty to arise either in our election, or execution of the means whereby to obtain our end: then there im-

immediately follows a *Doubting* or *Fluctuation* of the mind, whereby we are disposed to deliberate and consult ; and which is indeed a species of *Fear*. And this *wavering*, while it retains the Soul as it were in a doubtful balance betwixt two actions which are offered to her election ; is the cause that she performs neither, but takes time to consider before she determineth which to do, for fear of erring in her choice. Which *Fear*, if moderate and under the command of Prudence, is always of good use ; in that it serves to prevent *Temerity* or *Rashness* : but in some over-cautious Persons, it is so vehement, that though but one thing occur to be done or omitted by them, it holds them too long upon the rack of suspence, and hinders them from proceeding to action. And in this case, the *Passion* is *Excess* of *Doubting*, arising from too ardent desire of good, success, and weakness of *Understanding*, which hath indeed many confused notions, but none perspicuous and distinct concerning the means to effect its design.

If during this irresolution, we have determined the liberty of our choice, and fixed upon some one action in order to our end ; and the event be not answerable to our expectation : presently we are

Art. 31.
Remorse
and *acquiescence*.

affected with that disquiet of mind which is named by the Greeks, *Synteresis*; by the Latins, *Morsus Conscientiae*; and by the French, *Regret*; which yet doth not (as the precedent passion) respect the future, but present or past time. This *Remorse of Conscience* is no other but a kind of *Sorrow*, arising from a scruple interposed, whether what we are doing, or have done, be good, or not. And it necessarily presupposeth *dubititation*. For, if we were clearly convinced that the action we are doing, is really evil; we should certainly abstain from doing it: because the will is not carried to any thing, but what hath some shew of goodness in it. And if it were manifest, that what we have done, is really evil: we should presently be touched not with simple regret, but with *Repentance*. For, as the *Good* we have done, gives us that internal *Aquiescence* or satisfaction, which is of all other Passions the sweetest: so on the contrary, the ill we have done, punisheth us with *Repentance*, which is of all passions the bitterest.

Having in this manner discovered the originals and distinct proprieties of these two opposite Passions, *Hope* and *Fear*, with their genuin dependents; it may not a little conduce to the illustration of what

what hath here been briefly delivered concerning them, if we more expressly describe the divers *Motions* of the *Sensitive Soul* and *Spirits* that constitute their formal Reasons, so far at least as those motions are observable from their respective Characters or Effects.

In *Hope* therefore (which we defined to be a *gentle and sweet Effusion or Expansion of the Soul towards some good expected to come*) if we be possessed with an opinion, that the thing desired will shortly come to pass; I conceive that presently the Animal Spirits, which before were employed as Emissaries, to contemplate the image of the object, returning toward the Soul, give notice of the approach of the guest expected: and that thereupon the whole Soul composing herself by expansion to receive and welcome the same, sets open all the doors of the Senses to admit more freely all the good belonging thereunto; retains the imagination fixt and intent upon the grateful idea thereof; and by copious supplies of spirits dispatched into the nerves of the Heart, so invigorates and quickens the pulse thereof, that thereby the blood is more briskly sent forth into the outward parts of the body, as it were to meet the expected thing. Whence it is, that when

Art. 32.
The Motions of the Soul and Spirits in Hope.

when we are full of Hope, we feel a certain *inflation* both within and without in our whole body, together with a *glowing* but *pleasant heat*, from the blood and spirits universally diffused. But if during this comfortable emotion of the Soul, there occur any sudden cause of *Doubt* or *fear*; she is instantly checked and coold into an anxious *Retraction* of herself, and a sinking of the spirits; so that the motion of the Heart becomes weaker and slower, and the external parts grow languid and pale. For,

Art. 33.
The Moti-
ons of the
Soul and
Spirits in
Fear.

In *Fear*, the Sensitive Soul, which was before expanded, being surprised with apprehension of approaching Evil, and willing to decline it, immediately withdraws herself into her retiring Room, and shrinks up herself into herself; at the same time recalling her forces, the spirits, to her aid, and compressing them. If the Fear be exalted to the degree of *Terror*, and the Evil seem impendent; then at the same time the spirits are suddenly recall'd from the outguards, the pores of the skin also are shut up by strong constriction (as if the Soul would obstruct and barricado all avenues against her invading enemy) whereby the hairs are raised an end, and the whole body is put into a *Horror* or shaking. After this, if

if the passion continue, the whole army of spirits being put into confusion, so that they can not execute their offices ; the usual succors of *Reason* fail, and the powers of *voluntary motion* become weak ; yea sometimes, by reason of a resolution of the nerves and sphincters of the gutts and bladder, the *Excrements* themselves are let forth involuntarily. From this damp obscuring the *Lucid* part of the Sensitive Soul, there quickly succeeds an Eclipse also of the *Vital*. For the influx of the Animal spirits from the brain into the Cardiac nerves being intermit-
ted, the motions of the Heart must of necessity be rendred weak, and insuffi-
cient to maintain with due vigour and ce-
lerity the circulation of the blood : which therefore stopping and stagnating in the ventricles of the Heart, causeth *fainting* and *swooning* by oppression ; and some-
times (where the Passion is hightned into *Consternation*) also sudden death. And from this arrest of the blood in the Heart, by strong constriction of the nerves there-
unto belonging , we may with reason de-
rive that same anxious *oppression*, and *chil-
ling weight* which Men commonly feel in
their breast, when they are invaded by
violent *Fear* ; and upon which the most
acute *Monsieur Des Cartes* seems to have

re-

reflected his Thoughts, when he defined *Consternation* to be *not only a cold, but also a perturbation and stupor of the Soul, which takes from her the power of resisting evils that she apprehends to be near.*

*Art. 34. The Miti-
ons in Des-
peration.* This Fear, when it excludes all hope of evasion, degenerateth into the most cruel of all passions, *Desperation*. Which though by exhibiting the thing desired as impossible, it wholly extinguishes desire, which is never carried but to things apprehended as possible: yet it so afflicts the Soul, that she preserving in her Constriction, either though absolute despondency yields up herself as overcome, and remains half-extinct and entombed in the body; or driven into confusion and neglect of all things, contracts a deep *Melancholy*, or flyes out into a furious *Madness*; in both cases, seeking to put an end to her misery by destroying herself.

On the contrary, when Fear gives place to *Hope*; and that Hope is strong enough to produce *Courage*; thereby to incense the Soul to encounter the difficulties that oppose her in the way to her end: in this case she first dilates herself with great vigor and celerity, breaking forth as it were into flashes of efforts; then instantly diffuseth whole legions of spirits

spirits into the nerves and muscles, to extend them, in order to resistance or striking with all their forces; and uniting all her powers into a brave devoir to overcome, undauntedly pursues the conflict. Hence it comes, that the breast being strongly dilated and contracted alternately, the *voice* is sent forth more sounding and piercing then at other times; as if to sound a defiance and charge at one: the arms are raised up, the hands constringed into fists, the head advanced into a posture of daring and contempt of danger, the brows contracted, and the whole face distorted into an aspect full of Terror and threatenings, the neck swoln, and most other parts distended beyond their usual dimensions. All which *symptoms* evidently arise from a copious and impetuous effusion of Animal spirits from the brain, and of blood from the Heart, into the outward parts. ¶

From this concise explication of the motions of the Sensitive Soul, the spirits and blood, that constitute the passions of Hope and Fear, with their dependents, Animosity and Desperation, the clue of our method leads us to the *fifth* classis of passions.

The consideration of good present, and belonging to us in particular, begets in the Art. 35.
Joy.

Joy and

the Soul that delight which we call *Joy*, wherein consisteth our possession of that good, which the impressions of the brain represent to the Soul as her own.

First I say, that in this delightful commotion doth consist the *possession of good*; because in truth the Soul reaps no other fruit from all the goods she possesseth: and when she takes no delight or joy in them, it may justly be said, she doth no more injoy them, than if she did not at all possess them.

Then I add, that *the good is such as the impressions made upon the brain represent to the Soul as hers*; that I may not confound this Joy whereof I now speak, and which is a Passion; with Joy purely *intellectual*, which enters into the *Rational* Soul by an action proper to her alone, and which we may call a pleasant commotion raised by herself in herself, wherein consisteth the possession of good, that her intellect represents to her as her own. Tho' really so long as the Rational Soul continues conjoyned with the Sensitive, it can hardly be but that this intellectual joy will have the other that is a passion, for its companion. For, so soon as our Intellect observes that we possess any good, though that good be so far different from all that pertains to the body, that

that it is wholly unimaginable ; yet presently the *Imagination* makes some impression in the brain, from whence followeth a motion of the Sensitive Soul, and of the Spirits, that excite the passion of Joy.

Of this so grateful affection there are divers *sorts*, or (to speak more strictly) *degrees*. For, as various circumstances may intervene, and cause the Soul to be more or less affected with her fruition of the good she possesteth : so may we distinguish various differences of the passion itself. To be more particular ; as the good she possesteth, is great or small ; unexpected, or long desired ; durable, or transitory ; and as reason moderateth the appetite, or suffers it to be unbridled : so it comes to pass, that the Effusion of the Soul, and consequently the pleasure, is greater or less, permanent or momentary, immoderate or temperate, &c. And hence the kinds of more *remiss* Joy are call'd *Complacency*, *Jucundity*, *Gladness*, *Exhilaration* : and those of more *intens*, *Rejoycing Exsultation*, *Triumph*, *Boasting*, *Transport or Ecstasy*, *Laughter*, &c.

By the same reason, as the Evil that causeth the opposite passion of *Grief*, is in the present great or little, sudden or

Art. 36.
The vari-
ous Degrees
of Joy and
their names

Art. 37.
The vari-
ous Degrees
of Grief,
and their
names.

foreseen, long or short, and the like: so are there excited various kinds or degrees of *Trouble* or *Grief*; and accordingly the passion is distinguished into *Discontent*, *Sollicitude*, *Vexation*, *Sadness*, *Sorrow*, *Affliction*, *Misery*, *Lamentation*, *Weeping* and *Howling*. All which belong to *Grief*, which is an ingrateful *Languor* of the Sensitive Soul, wherein alone consisteth the incommodity that hapneth to her from Evil or defect, which the impressions made upon the brain, represent to her as her own. For, besides this, there is also an *Intellectual Sorrow* proper to the *Rational* Soul, which is not to be placed in the number of the passions, tho' for the most part it hath for its adjunct the passion of Sorrow; by reason of the most strict conjunction betwixt the two Souls in this life.

Art. 35.
Envy and
Pitty.

As the Good or Evil present, being represented as belonging particularly to ourselves, produceth Joy or Grief in us: so when Good or Evil is proposed to us, as belonging to *others*; we so far concern ourselves therein, as to judge them *worthy*, or *unworthy* of the same. If we judge them *unworthy* of the *good* that is hapned to them; that raiseth *Envy* in us: if we think them not to deserve the *Evil* that is befallen them, then we are affected

fected with *Pity* or *Commiseration*, which is a species of *Sorrow*; and the contrary to it is *Hardness of Heart*, proceeding either from flowness of imagination (for men of dull capacities are generally less apt to pity the calamities of others) or from strong opinion of our own *exemption* from the like sufferings, or from that inhuman temper of mind which the *Grecians* call *Misanthropia*, *Hatred* of all or most men; or finally from *despair* after long adversity, whereby the mind being grown as it were *callous* or *brawny* (as *Seneca* expresseth it) is apt to conceive, that no evil can come to it, greater than what it hath been accustomed to undergo.

On the *contrary*, they are more than others propense to *Commiseration*, who think themselves very weak, and obnoxious to adverse fortune: because representing to themselves another's misfortune, as possible to happen to themselves also (for the evil that happeneth to an innocent man, may happen to every man) they are easily moved to *pity*, but more out of *love* of *themselves* than of others. And yet it hath been ever observed, that men of the most *generous* and *Heroick* spirits, such who having by brave resolutions, and habitual magnanimity, elevated their Soul's above the power of fortune, and so

Art. 39.
Generous
men most
inclined to
*Commis-
eration*;
and why.

could fear no evil that she could bring upon them; have nevertheless been prone to *Commiseration*, when they beheld the infirmity of others, and heard their complaints; because it is a part of true *Generosity*, to *wish well to every one*. But the *Grief* of this *Heroick Commiseration* is not (as the other) *bitter*, but like that which *Tragical cases* represented in a *Theatre* produce, it is placed more in the *Sense*, than in the *Soul* it self, which at the same time enjoyeth the satisfaction of thinking that she doth her duty in sympathizing with the afflicted. And the *difference* betwixt the *Commiseration* of the *vulgar*, and that of *Generous* minds, doth chiefly consist in this; that the *vulgar* pitieith the misery of those who complain, as thinking the evil they suffer, to be very grievous and intolerable: but the principal object of generous pity, is the *imbecillity* and *impatience* of those who complain; because men of great *Souls* think, that no accident can fall upon a man, which is not really a less evil than the *Pusillanimity* of those who cannot endure it with constancy; which *Seneca* intimateth (*de tranquillitate animi*, cap. 15.) where he saith, *neminem flebo flentem; nam suis lacrymis efficit, ne ullis dignus sit*: and though they hate the vices of men, they

they do not hate their persons, but only pity them.

Manifest it is therefore, that in *some*, Art. 40. *Commiseration* is nothing but imagination of future Calamity to our selves, proceeding from the sense of another mans calamity ; as it is defined by *Mr. Hobbs* : Commiseration, a species of Grief mixt with Benevolence. in *others*, a species of *Grief* mixt with *Love* or *Benevolence* toward those whom we observe to suffer under some evil, which we think they have not deserved ; as it is defined by *Monsieur des Cartes*.

Manifest it is likewise, that the contrary passion, *Envu*, is a sort of *Grief* mixt with *Hate*, proceeding from our sense of prosperity in another, whom we judge unworthy thereof. A passion never expressible, but where the *Hatred* it contains, is against the unjust distribution of the good that is envied, not the person that possesseth it, or that distributed it. But in this corrupt age, there are very few so just and generous, as to be free from all hate towards their competitors, who have prevented them in the acquisition of a good which is not communicable to many at once, and which they had desired to appropriate to themselves ; though they who have acquired it, be equally or more worthy thereof.

Art. 42.
Acquies-
cence of
mind, a
kind of
Joy.

When we reflect our thoughts upon good done by *our selves*, there results to us that internal Satisfaction or *Acquiescence* of mind, which is a species of *Joy*; calm indeed and serious, but incomparably sweet and pleasant; because the *Cause* of it dependeth upon nothing but *our selves*: But then that cause ought to be *just*, that is, the good upon which we reflect our cogitations, ought to be of great moment: otherwise the Satisfaction we fancy to our selves, is false, and ridiculous, serving only to beget pride and absurd arrogancy. Which may be specially observed in those who esteem themselves truely religious, and pretend to great perfection of Sanctity, when in reality they are *Superstitious* and *Hypocrites*: that is, who because they frequent the temple, recite many prayers, wear short hair, observe fasting days, give alms, and perform other the like external duties of Religion; therefore think themselves to be arrived at the highest degree of purity, and to be so far in the favour of Almighty God, that they can do nothing that may displease him, and that whatever their passion suggesteth to them, is of holy zeal; though it not seldom suggesteth the most detestable crimes that can enter into the heart of Man, as the betraying of

tie s

ties, assassination of Princes, extermination of Nations, only because they follow not their Phanatick opinions. And this *Delusion* seems to be the Daughter of internal *Acquiescence* grounded upon an *unjust cause*. Again, to excite this most comfortable passion, it is requisite that the good act upon which we reflect, be *newly* done by us: because that constant satisfaction and self-acquiescence which always is a concomitant and certain reward of Virtue, is not a passion, but a pacific *Habit* in the *Rational Soul*; and is therefore call'd *Tranquility* and *Quiet of Conscience*.

On the contrary, from our remembrance of an *Evil* act by us committed, Art.43.
Repentance, a species of Grief, but allaid with som-
thing of Joy. ariseth *Repentance*, which is a branch of *Grief*, always most *bitter*, because the *cause* of it is only from *our selves*: but then this *Grief* is allayed by expectation of amendment, or returning into the right way to good; which is referrible to *Joy*. Nor doth the bitterness of this passion hinder it from being of excellent *use* in our life, when the action whereof we repent, is really *Evil*, and we certainly know it to be so: because in such cases it strongly inciteth us to do *better* in the future. But it is not *universally* profitable. For it is no rarity for men of weak

and timorous minds to be touched with Repentance of actions they have done; tho' they do not certainly know those actions to be really evil, but only believe them to be so, because they fear lest they be so, and if they had done the contrary, they would have been equally disquieted with repentance. Which is an imperfection in them well worthy Commiseration; and they ought to repent of such their Repentance.

Art. 44.
Favour.

When we observe, or recall to mind good performed by *another*, tho' not to our selves; we are thereby moved to *Favour* the doer: because we are by Nature inclined to like and love those who do actions that we think good, although from thence nothing of good redounds to us in particular. *Favour* therefore is a species of *Love*, accompanied with *desire* of seeing good to happen to the person whom we favour; and sometimes with *Commiseration*, because the adversity that falls upon those whom we think to be good, makes us the more to reflect upon their *merits*.

Art. 45.
Grati-
tude.

But if the good done by another upon which we reflect our cogitations, hath been done to *Us*; then to favor is adjoined *Gratitude*: which likewise is a kind

of

of *Love*, excited in us by some action of another, whereby we believe, that either he hath really benefited, or at least intended to benefit us in particular ; and accompanied with *Desire* to shew our selves thankful to him therefore. And therefore this passion of *Gratitude*, as it excells simple *Favour* in this, that it is grounded upon an action which concerns *Us* : so hath it far greater *force* upon the mind, especially in men of noble and generous natures. The Contrary hereunto is *Ingratitude*, which notwithstanding is no *Passion* (for Nature, as if she abhor'd it, hath ordained in us no motion of the Spirits whereby it might be excited) but a meer *Vice*, proper to men who are either foolishly *proud*, and therefore think all benefits due to them ; or sottishly *stupid*, so as to make no reflexion upon good turns done them ; or of *weak* and *abject* minds, who having been obliged by the bounty and charity of their Benefactors, instead of being grateful, prosecute them with hatred ; and this because either wanting the will to requite, or despairing of ability to make equal returns, and falsely imagining that all are like themselves, venal and mercenary, and that none doth good offices but in hope of remuneration ; they think that

their Benefactors have *deceived* them, and so deprave the benefit it self into an injury. *Hatred* then being an adjunct to *Ingratitude*; it follows that *Love* must attend on *Gratitude*, which is therefore always honest, and one of the principal bonds of human Society.

On the contrary, when we consider Evil committed by another, tho' not against us; we are moved to *Indignation*: which is a species of *Hatred* or *Aversion* raised in us against those who do any thing that we judge to be evil or unjust, whatsoever it be; sometimes commixed with *Envy*, sometimes with *Com-
miseration*, sometimes with *Derision*; as having its object very much diversified. For, we conceive *Indignation* against those who do good or evil to such who are *unworthy* thereof; but we *Envy* those who *receive* that good, and *pity* those who *suffer* that evil. And yet in truth, to obtain good whereof one is *unworthy*, is in some degree to do evil: and to do Evil, is in some sort to suffer evil. Whence it comes, that sometimes we con-*joyn* *Pity*, sometimes *Derision* to our *Indignation*, according as we stand *well* or *ill* affected toward them whom we observe to commit Errors. And therefore the *Laughter* of *Democritus*, who derided

the

Art. 46.
Indignati-
on.

the folly, and the *Tears* of *Heraclitus* who bewail'd the misery of mankind, might both proceed from the same cause, *Indignation*.

But when Evil is done to *our selves*, ^{Art. 47.} the passion thereby kindled in us, is *An- Anger*: which likewise is a species of *Hatred* or *Aversation*, but different from *Indignation* in this, that it is founded upon an action done by another with intention to hurt *us* in particular; and in this, that when it hath proceeded to a determination of hurting him who did it, it passeth into *Revenge*; whereas at first accession, the passion is no more but *Excandescence* or sudden *Heat of Blood*. The *Desire* of *Revenge* that for the most part accompanieth *Anger*, whether it aim at the *death*, or only at the *subjection* of our *Enemy*; is indeed directly opposed to *Gratitude* (for this is desire of returning good for good, and that, desire of requiting evil with evil) as *Indignation* is to *Favour*: but incomparably more *vehement* than either of those three affecti-
ons; because the desire of repelling harm, and revenging our selves, is a part of natural instinct necessary to self-preservation, and so of all desires the strongest and most urgent. And being consocia-
ted with *Love of our selves*, it affords to
Anger

Anger all that impetuous agitation of the Spirits and Blood, that *Animosity* and *Boldness* or *Courage* can excite: and its assistant, *Hatred*, promoting the accension of the *Choleric* or more Sulphureous parts of the blood as it passeth through the heart, raiseth in the whole mass thereof a more pricking and fervent heat, than that which is observed in the most ardent *Love*, or most profuse *Joy*.

Art. 48. Now as men inflamed with this violent passion, or (as *Seneca* calls it) *short fury* of *Anger*; of *Anger*, differ in point of temperament; and as this or that of the usual concomitants of it, is more powerful than the rest: so must the *Effects* thereof upon the body be likewise *various*. And from this variety men have taken notice chiefly of *two* sorts of *Anger*. *One*, that is quickly kindled, violent at first, and discovers it self visibly by outward signs: but performs little, and may be easily composed. And to this, they are most obnoxious, who are *good-natur'd*, i. e. who are inclined to *goodness* and *love*. For it ariseth not from profound *Hatred*, but from a sudden *Aversion* surprising them: because being propense to conceive that all things ought to proceed in that manner which they judge to be the best; whenever they see others to act otherwise, first they admire,

mire, and then are *offended*; and so what would be to others matter only of *Indignation*, to them proves cause of *Anger*. But this commotion is soon calmed, because the force of the sudden *Aversion* that raised it, continues not long: and so soon as they perceive that the thing for which they were offended, ought not to have commoved them to passion; they suppress their displeasure, and repent of it. The *Other*, that wherein *Hatred* and *Grief* are predominant, and which though at first it hardly betray it self by external signs, unless by the sudden paleness of the countenance, and trembling; is notwithstanding more impetuous within, secretly gnaws the very heart, and produceth dangerous effects. And to this pernicious sort of *Anger* they are most subiect, who have *proud*, *cowardly* and *weak* Souls. For, so much the greater do injuries appear, by how much the better opinion pride makes Men to have of themselves; yea and by how much greater value is put upon the things which the injuries take away: and these things are always so much the more valued, by how much the more weak and abject the Soul is; because they depend upon others, but the *Generous* put little value upon any thing that is not dependent upon themselves.

When

Art. 49.
Glory and
Shame.

When we consider what opinion other Men have of Us, the Good which we believe to be in us, disposeth us to *Glory*, which seems to be composed of *Self-estimation*, and *Joy*; for to see our selves well esteemed by others, gives us cause to have a good esteem for our selves: and on the contrary, the *Evil* we are conscious of, forceth us to *Shame*, which is a sort of *Modesty* or *Humility*, and *self-diffidence*; for (as we have formerly observed) who thinks himself above *Contempt*, will hardly be humbled to shame. These two Passions, *Glory* and *Shame*, tho' directly opposite each to other, do yet agree in their End, which is *to incite us to Virtue*; the first by *hope*, the other by *fear*: and that we may make a right use of them both, we are to have our judgment well instructed what actions are truely worthy *praise* or *dispraise*; lest otherwise we be ashamed of virtuous actions, or affect glory from vices; as it happeneth to too great a part of Mankind.

Thus have we at length recounted all the Passions of this our *fifth* division, and deduced them successively from their several causes or occasions, in that order wherein their most remarkable diversity seem'd to us most easily distinguishable.

But

But now because some of these passions are simple, others *Composed*; and that to our more clear understanding of the nature of both sorts, it is necessary to enquire more profoundly into the *Motions* of the Sensitive Soul and spirits that constitute their Essential Differences: it remains that we yield obedience to that necessity, so far forth at least, as to explain the Motions proper to that couplet of more simple affections, *Joy* and *Grief*; the two points in which all human actions end; and to that most violent one, *Anger*.

In *Joy* therefore, which is a delightful commotion of the Sensitive Soul as it were triumphing in her fruition of good or pleasure; I conceive that the Animal spirits being in great abundance, but with a placid and equal motion, sent by the nerves to the heart, cause the orifices thereof to be opened and dilated more than at other times; and so the blood to be imported and exported more copiously and freely: and that by this means, from the blood are brought into the brain a plentious supply of new spirits, which extracted out of the purest and most refined parts of the blood, are most fit to confirm the idea formed of the present good in the imagination, and so to continue the Soul in her pleasant Emotion.

Hence

Art. 50.
The Moti-
ons of the
Soul and
spirits in
Joy.

Hence probably it is, that in this most agreeable passion, both the *pulse* is always made equal and more frequent, tho' not so intense and strong as in *Love*; and a certain *grateful heat* is felt, not only through the Lungs and all the breast, but through all outward parts of the body; from the diffusion of the blood in full streams into them, which is discernible even by the florid *purple colour* where-with they are suddenly tinged, and by the *inflation*, or plumpness of all the muscles of the *face*, which is thereby rendered more *serene*, sweet and cheerful. Easie therefore it is to infer, that as this passion is most congruous to the nature of the Corporeal Soul, so are the corporeal motions that accompany and characterize it, most profitable to *health*; provided they be *moderate*. For, this Commotion and Effusion may be so vehement and sudden, that the Soul may become weak, and unable to rule the body, or to actuate the organs of speech, yea swooning, and death it self somtimes follow profuse an insolent Joy. So *Lacon Chilo*, an eminent Philosopher, suddenly expired in excessive joy, beholding his Son a Victor in the Olympic games. So *Sophocles* the Tragedian also, and *Dionysius* the Tyrant died of a surfeit of sudden Joy.

The

The *reason* whereof seems to consist, not in a vehement effusion and dissipation of the vital spirits, and a destitution of the Heart consequent thereunto ; as *Fernelius* would have it ; because the faster the blood is effused through the arteries from the heart, the swifter must it return to the heart through the veins, so that the heart cannot be totally exhausted and left destitute of blood : but rather in a surcharge and *suffocation* of the heart by too redundant an afflux of blood. For, upon extraordinary dilatation of the flood-gates of the heart by immoderate joy, the current of blood both out of the *Vena cava*, and from the *arteria venosa*, may pour it self with so much violence, and in so great a quantity, into the ventricles thereof, that the heart, unable to discharge it self soon enough of that oppressing deluge, by retruding its *valves*, may be suffocated ; its motions stopped, and the Vital Flame in a moment extinguished. For certain it is, that in the state of health, the blood is not admitted into the heart beyond a *certain proportion* : nor can that proportion be much exceeded, whatever the cause be that maketh an *apertio portarum* there, without manifest danger of life.

Among

Art. 51. Among the *Signs* of this delightful passion, some have given the upper hand to that distortion of the countenance, accompanied with a loud, but inarticulate voice, which we call *Laughter*: but this being neither proper to, nor inseparable from *Joy*, cannot therefore belong to it *essentially*. That it is frequently a concomitant of *Mirth* or *Hilarity*, is not to be disputed: but *Mirth* is the lowest degree of *Joy*, a light and superficial emotion of the Sensitive Soul and Spirits, a kind of short tickling of the Imagination, usually expressed by *Laughter*: whereas *Joy* is serious, profound and grave, according to that memorable Sentence of *Seneca* (epist. 23.) *res severa est verum gaudium*. *Laughter* then (as I said) is not *proper* to all *Joy*; because common to some other affections: for some are observed to laugh out of *Indignation*, others out of *Contempt* and *disdain*, neither of which belong to any kind of *Joy*. Nor is it *inseparable* from *Joy*; because in truth *Joy* cannot produce *Laughter*, unless when it is very *moderate*, and hath somthing of *Admiration* or *Hate* mixt with it. For, we have it from the oracle of *Experience*, that in great and profound *Joy*, the cause of it, whatsoever it be, doth never force us to break forth

forth into laughter: nay more, that we are most easily provoked to laugh, when we are *sad*. Whereof the reason seems to be, either because in solid Joy, the Sensitive Soul is so deeply commoved, so entirely taken up with the delight of fruition, that she cannot attend to shake the Midriff, Lungs and Muscles of the breast, nimbly and strong enough to create laughter: or because at that time the Lungs are so distended with blood, that they cannot, by repeated concussions, or alternate contractions and relaxations, be further inflated with air, whereof no little quantity is required to produce that loud sound emitted in Laughter. That we may understand this matter more fully, let us examine the *cause* or *occasion*; and the *Motions* of Laughter.

As for the *First*, viz. the *Occasion* or Motive; whatsoever it be, there must concur therein these three *Conditions* following. (1.) It must be *new* and *surprising*; because whatsoever is ridiculous at first, ceaseth to be so when grown stale. (2.) It must be such a novelty as may suggest to us a conception of some *eminency* or advantage in our selves above another whom the occasion chiefly concerns: for, why are we naturally prone to laugh at either a *jest* (which is nothing but a witty or elegant discovery and



representation of some absurdity or indecency of another, abstracted from his person) or at the mischances and infirmities of others ; unless from hence, that thereby our own *abilities* are the more set off and illustrated, and recommended to us by way of comparison ? (3.) It must not touch our own, or our friends *honour* ; for, in that point we are too tender to tolerate, much less to laugh at a jest broken upon our selves, or friends, of whose dishonour we participate. These requisites in a ridiculous cause considered, we may adventure to conclude, that *Laughter is an effect of sudden, but light Joy arising from the unexpected discovery of some infirmity in another not our friend, and from imagination of our own eminency, and exemption from the like.* Here then (you see) is something of *Admiration* from the *Novelty*, somthing of *Aversion* from the *Infirmity*, and somthing of *Joy or triumph* from our opinion of some *eminency* in our selves.

Art. 53.
Laughter
out of In-
dignation.

And as for that *Laughter* which is sometimes joyned with *Indignation* ; it is most commonly *fictional* or *artificial*, and then it depends entirely upon our *will*, as a voluntary action : but when 'tis *true* or *Natural*, it seems likewise to arise from *Joy* conceived from hence, that we see our selves to be above offence by that evil which is the cause or subject of our indignation.

nation; and that we feel our selves surprised by the unexpected novelty of the same. So that to the production of this Laughter also is required a concourse of *Joy Aversion* and *Admiration*; but all moderate.

If this be so, what then shall we think of that odd example of Laughter in *Ludovicus Vives*; who writes of himself (lib. 3. de *Anima*, cap. de *Risu*) that usually when he began to eat after long fasting, he could not forbear to break forth into a fit of loud laughter? This doubtless was not *voluntary*; because he strove to suppress it: nor could it be *Convulsive*, such as Physicians call *Risus Sardonus*; because he was in perfect health, sensible of no pain therein, nor incommodity thereupon. It must therefore be *Natural*, though not *Passionate*; proceeding from some cause very obscure, and *idiosyncritical*, that is peculiar to his constitution: perhaps this, that in this Learned man either the *Lungs* were more apt to be distended with blood, or the *Midriff* more easily put into the motions that produce laughter, than commonly they are in most other men. The *First*, because in general, whatsoever causeth the Lungs to be suddenly puffed up and distended with blood, causeth also the external action of Laughter; unless where sorrow changeth that action into groaning and weeping:

Art. 54.
A rare example of involuntary Laughter.

the *other*, because all Laughter is made chiefly by quick and short vibrations of the *Midriff*. But this rare *Phenomenon* we shall perhaps be better able to solve, when we have considered how the action of Laughter is performed in all other men.

Art. 55.
A conjecture concerning the cause thereof.

Concerning this Problem therefore, it is observable that in *Man*, there seems to be a greater consent or sympathy, or rather *commerce* of motions betwixt the *Midriff* and the *Heart*, yea and the *Imagination* also; than in Brutes of what order or tribe soever: and that the *Reason* given hereof by the most accurate of our Modern Anatomists, is this; that the principle Nerve of the *Midriff* is rooted in the same Nerve of the Spine (named *Nervus vertebralis*) from whence there comes a conspicuous branch into the grand *plexus* of the *Intercostal* nerve; and that commonly two, sometimes three other branches more are derived from that same notable *plexus*, into the very trunk of the Nerve of the *Diaphragm* (as you may see most elegantly represented by Dr. *Willis* in the 9th *Table* of his most elaborate Book *de Anatomia Cerebri*) which are not found in Beasts. For, from this plenty and singular contexture of nerves, it may be conjectured, not only why the *Diaphragm* doth so readily conform its motions to those of the *Præcordia*, and of the

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Animal Spirits excited in passions of the Mind, and co-operate with them ; but also why *Risibility* is an affection *proper* only to *Man*. For (as the same most curious Dr. *Willis* reasoneth, in his chapter of the functions and uses of the *Intercostal* pair of nerves) when the Imagination is affected with some pleasant and new conceipt, instantly there is caused a brisk and placid motion of the heart, as if it sprung up with joy to be alleviated or eased of its burden. Wherefore that the blood may be the more speedily discharged out of the right Ventricle of the heart into the Lungs, and out of the left into the *Aorta* or grand Artery ; the *Diaphragm*, being by abundance of Animal spirits immitted through so many nerves proceeding from the aforesaid *Plexus*, briskly agitated, is by nimble contraction drawn upwards; and so making many vibrations, doth that at once raise up the *Lungs*, and force them to expel the blood out of their vessels unto the *arteria venosa*, and to explode the air out of their pipes into the windpipe ; and this by frequent contractions of their arex and spongy substance, answerable in lenty time and quickness to the vibrations of may be *Midriff*. And then because the same *Intercostal* nerve, which communicateth motion with the nerve of the *Diaphragm* below, is conjoyned above also with the nerves

of the jaws and muscles of the face; thence it is, that the motions of Laughter being once begun in the breast, the face also is distorted into gestures or grimaces pathetically correspondent thereto. And this is the most probable account I am able at present to give of the *occasions and motions of passionate Laughter* in general: nor can I at present think of any more plausible conjecture concerning the reason of the admirable laughter of *Ludovicus Vives*, than this; that in him the nerves inservient to the motion of the Midriff, might be after such a peculiar manner contrived and framed, as easily to cause quick and short reciprocations thereof, upon the pleasant affection of his Imagination by the grateful relish of his meat, after long abstinence, which doth always heighten the pleasure of refection. But we have infested too long upon the *motions of Joy*.

Art. 58.
The Motions and Effects of Sorrow.

In the *contrary* whereof, viz. *Grief or Sorrow* (which we have above described to be an ingrateful *languor* of the Soul from a conception of evil present, moving her to *contract* her self, that she may avoid it) the *Animal Spirits* are indeed recalled inward, but slowly and without violence: so that the *blood* being by degrees destitute of a sufficient influ of them, is transmitted through the head

with too slow a motion. Whence the pulse is rendered *little, slow, rare, and weak*; and there is felt about the heart a certain oppressive *strictness*, as if the orifices of it were drawn together, with a manifest *chillness* congealing the blood, and communicating it self to the rest of the body. From which dejecting symptoms it is easie to collect, that this doleful affection, especially if it be vehement and of long continuance, cannot but infer many, and grievous incommodities to the whole body. For, besides this that it darkneth the *spirits*, and so dulls the *wit*, obscures the *Judgment*, blunts the *memory*, and in a word beclouds the *Lucid* part of the Soul: it doth moreover incrassate the blood by refrigeration, and by that reason immoderately constringe the heart, cause the lamp of life to burn weakly and dimly, induce want of sleep by drying the brain, corrupt the *nutritive juice*, and convert it into that Devil of a humor Melancholy. No wonder then if in men overcome with this so dismal passion, the countenance appears pale, wan and lifeless; the limbs grow heavy and indisposed to motion, the flesh decays and consumes through want of nourishment, and the whole body be precipitated into imbecillity, *Cachexy* or an evil habit, languishing

ing and other cold and chronic diseases. All which the wisest of Men, King *Solomon*, hath summ'd up in few words in **17 Chap.** of his *Proverbs*, where he advertiseth, that *a sorrowful spirit drieth up the very bones*. And yet notwithstanding, it is very rarely found, that from *Grief* either long and obstinate, or violent and suddenly invading, any man hath fallen into a *swoon*, or been *suddenly extinguished*. Which I am apt to refer to this; that in the ventricles of the heart, tho' but very slowly commoved, there can hardly be so small a quantity of blood, but it may suffice to keep alive the vital flame burning therein, when the orifices of them are almost closed, as commonly they are by immoderate grief.

Art. 57.
Sighs and
Tears.

Sometimes this bitter passion is *signified* by a certain uncomely distortion of the face, somewhat different from that of *Laughter*, and accompanied with *Tears*; sometimes only by *Sighs*: by *Sighs*, when the *Grief* is *extreme*: by *Tears*, when it is but *moderate*. For as *Laughter* never proceeds from great and profound *Joy*, so neither do *Tears* flow from profound sorrow; according to that of the *Tragedian*, *leves curæ loquuntur, ingentes stupent*. Nor is weeping the *pathognomonic* or infallible sign of *Grief*. For, all tears are not *voluntary*; every light hurt or pain of the

the Eyes causing them to distill against our will: nor all voluntary ones the effect of *Grief*. Some weep for sudden joy joyned with *Love*, especially *old* men: some when their revenge is suddenly frustrated by the repentance and submission of the offender; and such are the tears of *Reconciliation*. Some again weep out of *Anger*, when they meet with a repulse or check of their desires, which causing them with regret to reflect upon their own weakness and insufficiency to compass their wills, affects them with displeasure, and dissolves them into tears, as if they fell out with themselves upon a sudden sense of their own defect: and this kind of weeping is most familiar to *Children* and *Women* when they are crossed in their wills and expectation; as also to *Revengeful* Men, upon their beholding of those whom they commiserate, and their want of power to help them. Notwithstanding the occasions of weeping be thus various, yet since *Tears* are frequently both an effect and testimony of *Sorrow*, the nature and motions whereof we have now attempted to explain: it can be no impertinent *Digression*, to inquire further into their *original* or source, and the *manner* how they are made to flow, when we are willing to

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signifie our present sorrow by shedding them.

Art. 58.
Whence
Tears flow.

As for the *Fountain* therefore whence all our Tears flow, and the *Matter* whereof they consist; the successful industry of Modern Anatomists hath discovered, that in the *Glandules* placed at each corner of the Eyes, there is either from the *blood* brought thither by the arteries (as the vulgar doctrine is) or (as I, upon good reasons elsewhere delivered, conceive) from the *Nutritive juice* brought by nerves, separated, and kept in store a certain thin, clear and watery humor, partly *saline*, partly *subacid* in taste; the *use* whereof is as well to keep the globes of the eyes moist and slippery, for their more easie motion; as to serve for *Tears* when we have occasion to shed them. And to this some have added, that because there are certain branches of nerves (like the tendrels of a Vine) incircling the vessels leading to and from those *Glandules*, and by their tension sometimes constringing them: therefore it is probable, that when the serous humor is too abundant in the blood brought into the brain, the same is by the arteries (whose pulse is quickned somwhat by the pressure of these nerves) brought more copiously than at other times, into those

Glas-

Glandules, and after its separation, there detained from returning by the veins, that are likewise streightned by constriction of the same nerves. Whether this ingenious conjecture be true or not ; certain it is, that the matter of Tears is the same with the liquor of the *Lymphe-ducts*, and that they flow from the aforesaid *Glandules*, which are therefore named *Lacrymales*.

And as for the manner of their *Ex-^{Art.59.}pression* from thence in some passions of ^{How they are expres-} the Mind ; the most rational account I ^{sed.} have hitherto met with concerning it, is this. When any occasion of *weeping* occurs, and affects the Sensitive Soul ; instantly the *Ventricles* of the heart, with all the *Præcordia*, are by the blood in abundance brought into them, more than usually crowded and distended, and the *Lungs* also stuffed and inflated, so that they cannot perform the action of respiration but by *sobbs* intermixed ; and the *Midriff*, to give room to such distension of the heart and Lungs, is pressed downward, with a more intense contraction alternately succeeding ; which great depression and brisk contraction being repeated, is the efficient cause, of *Sobbing* ; and at the same time the air being with difficulty admitted into the lungs, by reason

son they and the Midriff are so exceedingly distended, and with no less difficulty exploded again by the windpipe: thence comes that whining sound of *crying* and *howling*. To this affection of the *vitals*, the parts of the *face* also, being distorted into a sad and mournful aspect, exactly correspond: because the nerves which contract the *Præcordia*, have a communion of continuity, and co-operate with those which are inserted into the muscles of the face, and which compose it into the postures of weeping and laughter in passion. Nor doth the disorder cease here, but extend it self to the upper region also, to the *brain*, where the Spirits being put into confusion, and the arteries surcharged with too great an afflux of blood from the oppressed heart; the palace of the Soul it self is brought into danger of a purple deluge. For prevention whereof, the nerves incircling and binding the trunks of the arteries in many places, strongly constringe them; so that the commotion of the blood is much repressed, the liquor thereof, (in the beginning of the passion highly rarified) suddenly condensed, and the serous part of it being put into a flux, is transmitted into the above mentioned Glandules of the Eyes, there pla-

placed and destined by nature to receive it. And then because these *Glandules* are in like manner constringed, and as it were squeez'd by certain nerves that are of the same original and community with the *Pathetic* nerves of the *face* and *heart*: the *serous* liquor is expressed out of them through their *excretory channels* leading to the corners of the *Eyes* (most accurately described, with their uses, by that diligent Anatomist *Nichol. Steno*, in a singular treatise) and forced to distill in a shower of tears; the strong *Contracti-*
on of the *membranes* investing the whole *brain*, concurring to that *expression*.

The same may be said likewise of the *shedding tears for Joy*. For in sudden ^{Art. 60.} *and great Joy* conjoyned with *Admira-* ^{The rea-} *tion*, the *Sensitive Soul* very much ex-^{son of} *anding her self*, and diffusing the *Animal* *Spirits*; the *blood* is sent from the *heart* in great abundance to the *brain*, so as to distend the *vessels* that contain it: which being soon after strongly contracted again by the same *Soul* withdrawing her self inward, (as if she feared a dissolution by so ample an *Effusion*) the *blood* is in a sort put into a *flux* or *melted*, and the *serous* part of it separated in the *Glandules* of the *Eyes*, and thence by *constriction* of the *nerves* squeezed ^{for Joy.} *orth in tears.*

This

Art.61.
Why Infants and Old men are more prone than others to shed tears.

This being supposed, it will not be difficult for us thence to infer, that *Infants* and *Old Men* are indeed more prone to weep than those of middle age: but for divers reasons. *Old men* for the most part weep out of *Love* and *Joy* together; because both these affections causing a great Effusion of the Sensitive Soul, and consequently a large apertio[n] of the ori-fices or fluices of the heart; must therefore (especially where they are conjoy ned) cause also a transmission of the blood from thence to the brain in great abundance: and the blood being generally more thin and diluted with *serum* in *old men*, must yield more matter for their tears. But *Infants* commonly weep out of mere *Sorrow* and vexation, such as is not accompanied with the least of *Love*: because the *contraction* of the Soul and nerves caused by sorrow, expref-seth out of the blood (which is always abundant in children) brought by the arteri-ies to the brain, a sufficient quantity of *serum* to replenish the *Glandula Lacrymales*, and supply the sourse of their tears.

Art.62.
the reason of Sighing
and Sobbing.

There remains yet that other *Sign* of *Sorrow*, which doth usually accompany it when it is profound and *extreme*; and that is *Sighing*; the cause whereof is very much

much different from that of weeping, though both proceed from Grief. For, the same occasion that moves us to shed tears, when our Lungs are stuffed and distended with blood ; provokes us also to fetch deep *sighs*, when they are almost empty, and when some sudden imagination of *Hope* or comfort opens the sluice of the *Arteria Venosa* in the lungs, which sorrow had lately contracted. For, then that little blood that remained in the lungs, in a moment passing down through that pipe into the left ventricle of the heart ; the ambient air instantly rusheth by the mouth into the lungs, to replenish that place the blood had left free : and this *great and quick repletion of the lungs with air*, is what we call *Sighing*.

You have now heard what Conjectures seem to me most consentaneous to reason and Anatomical observations, concerning the Corporeal Motions excited in those two eminent passions, Joy and Sorrow, with their usual Adjuncts, Laughter and weeping : be pleas'd to hear also a few words touching the more violent motions proper to *Anger*, which I have promised next to consider.

That the *Effects* of this most vehement Commotion of the Sensitive Soul are *various*, not only as the *occasion* or *injury* is *conceived* Art. 63. The Motions and Symptoms of Anger.

conceived to be greater or less ; but also according to the various *temperaments* of persons, and to the diversity of other *Passions* conjoyned therewith : is obvious to common observation, and we have already hinted. And from this variety it is, that men have distinguished Anger into *Harmless* and *Dangerous*, or simple heat of blood, and thirst after Revenge : assigning moreover to each sort its proper *Signs* or *Characters* observable in the outward parts of the body, and especially in the *face*. For some when they are angry, look *pale*, or *tremble* ; others grow *red*, or *weep* : and the vulgar judgeth the passion of the *first* sort to be much more *dangerous*, than that of the *other*. Whereof the *reason* may be this ; that when we either will not, or cannot shew our resentments, and revenge otherwise than by our change of countenance, and by words ; we then put forth all our heat, and exert all our force at the very beginning of the commotion ; so that the blood being in this sudden effort copiously effused from the heart into the face, and there detained a while by constriction of the veins by those branches of the *Fifth* pair of nerves that are inserted into the muscles of that part ; we are forced to appear in the scarlet livery of *shame*, that is,

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to blush out of indignation and regret or grief at the unworthy affront. And sometimes the first emotion of *desire* to vindicate our selves, together with *commiseration* of our own want of power to revenge more effectually, causeth us also to *shed tears*.

But they who on the contrary, reserve themselves for, and strongly resolve upon *revenge* in time to come, grow deeply *sad* and *pensive* at the present; as conceiving themselves thereunto obliged by the nature of the injury done to them, and casting about in their thoughts how to accomplish their revenge: and all this while the *Sensitive Soul* persisting in her *Contraction* and revocation of the Spirits inwards, there is no extraordinary, nay but little diffusion of the blood outwards. And sometimes they also *fear* the evils that may ensue from the revenge they intend; which strikes them into *paleness*, *shivering* and *trembling*: the *Sensitive Soul* being then distracted betwixt the contrary motions of *desire* of revenge, and of *fear* of the ill consequents thereof; like a Sea beaten by two contrary winds. Yet after this first conflict is over, when they come to *execute* their revenge, then fear giving place to rage, they soon grow the more *inflamed* and *daring*, by how much

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the *colder* they were during their deliberation: as in *Fever*, that invade with cold and shivering, the following heats are always most ardent and unquenchable. You see then how the *Motions*, and consequently the *Efforts* and *Effects* of this violent passion may be diversified even by diversity of other *affections* conjoyned therewith. For in the *Harmless* and *Blushing* or *Weeping* anger, there is always a mixture of *shame* and *self-pity*; which by allaying the desire of revenge, helpeth much to check and moderate the commotion of the blood; and therefore such anger seldom lasteth long, and is more easily composed: when on the other side, in the *Pale* and *Trembling*, but *Dangerous* anger, there is first deep *Indignation*, then *Fear*, and at last *Furious* perfuit of *revenge*; by which the blood being most violently agitated, and the sulphureous parts of it all kindled into a flame, is not to be calmed and reduced to temper, unless by the pleasure of revenge, or by triumph in the submission of the Enemy, or by the cold damp of repentance. For prevention of which most bitter passion, by moderating our Anger; I think my self in *Charity* obliged to conclude this argument with an excellent *Moral* remark of *Monsieur des Cartes*.

Although

Although the passion of *Anger* be in it self *usefull*, in that it inspires us with vigour and courage necessary to repel injuries: yet the *Excesses* of no other passion are with greater care and caution to be shunned. Because by perturbing our judgment, they often induce us into those errors, whereof we ought afterward dearly to repent: yea sometimes they hinder us from repelling injuries so safely and honourably, as otherwise we might, if we were less commoved. But as nothing doth more encrease the flame of *Anger*, than *Pride*: so (I am perswaded) nothing can more abate and restrain the excesses of it, than true *Generosity*. Because while *Generosity* makes us to have but little value for all things that may be taken from us; and on the other side, to prize above all temporal things, our *Liberty* and *Empire* over our selves, which is lost when we are capable to be hurt by another: it makes us with *Contempt* alone, or at most with *Indignation* to revenge those injuries, with which weaker minds are wont to be offended.

Being now at length arrived at the end of this my divertising Exercise, wherein I propos'd to my self to inquire into the *Occasions, Causes, Differences,*

Motions and Effects of the most powerful and remarkable of all the *Passions*, by which the mind of Man is apt to be perturbed ; so far as my weak understanding assisted by reading and meditation would permit : before I lay aside my pen, I find it requisite to advertise you briefly of *two* things, *one* whereof may conduce to your more easie comprehension of what I have hitherto delivered concerning the more general *Differences* of the Passions ; the other may serve to my exemption from the censure of the *Illiterate*.

Art. 65. The *First* is, that of all the Passions That of all recounted and described in this impolite discourse, there are only *six* that seem to be *Simple* and *Principal*, namely *Admiration*, *Love*, *Hatred*, *Desire*, *Joy* and *Grief* ; which are therefore said to be *Simple*, because they consist of only one single act or commotion of the Sensitive Soul disturbed with the apprehension of things whether real or imaginary. For, as to all the *rest* ; either they are but various *species* of those Simple ones, or they result from divers *mixtures* and combinations of them ; being therefore named *Mixt Passions*, because they consist of more than one act or Motion. If therefore I have chiefly considered the Nature, motions, and principal Effects of the *Six*

Sim-

Simple or *Primitive* passions; contenting my self only with a brief *Genealogie* of the *Compound* or *Derivative*, as sufficient to direct your cogitations to the various *Mixed* commotions whence they result: it was only leſt I might abuse your patience by undecent repetitions, or oppreſs your mind with too great multiplicity of particulars, which is none of the leaſt im- pediments of Science.

The *Other* is, that notwithstanding the *Excellency*, and singular *Utility* of the Argument whereof I have treated in this Discourse; yet feeing my design in com- posing it, hath been partly to render my present solitude leſs tedious to my self, and chiefly to give you ſome testimony that I convert not my leisure into idleness: You ought not to frustrate my confidence of your ſecrecy, or to expose my defects, by communicating these papers to *Others*. Not to *Philofophers*, leaſt they find nothing *new* in them but my *Lapses*. Not to the *Unlearned*, because they are incompetent judges of *truth* or *error*, el- pecially in ſuch Philosophical Enquiries; more addiicted to barbarous contempt of Knowledge in others, than to confefs ig- norance in themſelves. To *These* there- fore (you may be moſt aſſured) I am not ambitious you ſhould recommend this

Art. 66.
Reasons a-
gainſt
publicati-
on of this
discourse.

Treatise, wherein is contained nothing that can either please, or reform them. I know it is no less difficult to teach them the art of regulating their exorbitant Passions, than it is to bring them to prefer the severe dictates of *Reason*, to the flattering suggestions of *Sense*; or to convince them, that really nothing is *pleasant*, but what is also *honest*; nothing *very desirable*, but the right use of their *freedom of will*; nothing *formidable*, but *the evil they themselves commit*. I know, that in the *Vulgar*, *Religion* is *fear*; *constancy*, *bruitish obstinacy*; *zeal*, *pride*; *friendship*, *interest*; and *virtue* it self but *dissimulation*. I know also, that the multitude is not led by *merit*, but carried headlong by *prejudice*, to *praise* or *dispraise*: and that they are more propense to *malignity* and *detraction*, than to *charity* and *candor*. The *Vulgar* then, and all that herd with them, I exclude from my studies; lest by perversely interpreting them (as they do all things) they should interrupt my *tranquility*, which I value infinitely above their *favour*, and wherein I endeavour to find a *happiness*, which neither their *hatred*, nor the *iniquity* of Fortune shall take from me.

That I may find this the sooner, I
now

now and then entertain my self with serious reflections upon my own *defects*, as the only impediments that have hitherto hindered me from attaining unto it: and among the rest, I hold my mind longest fixed on this following *Meditation*: which I therefore freely impart to you who are my *Friend*, both because I think it may be of equal use to you also, by helping you to moderate your *Affections* to the transitory things of this shadow of life; and because the precedent discourse will perhaps be somewhat the less imperfect, after it hath received so pertinent a

CONCLUSION.

Art. 1.
That all
the *Good*
and *Evil*
of this life
depends
upon the
Passions.

THAT all the Good and Evil of this life depends upon the various *Passions* incident to the Mind of Man; I need no other document than my own dearly bought Experience: which hath too often convinced me, that while I out of weakness suffered my self to be seduced and transported by the ardor and excesses of my *Affections*, I have fallen into Errors, that have more dejected my spirit, than a long succession of misfortunes could ever do; and from whence I could not expect better fruit, than that of shame, sorrow and repentance.

Art. 2.
Which yet
were insti-
tuted by
Nature as
*incite-
ments to*
the Soul.

Notwithstanding this, I ought not to be so unjust, so ingrateful to *Nature*, as to transfer the blame of such Errors upon *her*; as if she had been less careful than she might have been, to secure Man from intelicity: only because she thought fit to make him obnoxious to so great a multitude of inward *Perturbations*. No, I ought rather to remember, that among all of them, there is no one but hath its

Use,

Use, and that a good one too: provided we rightly employ the forces *Nature* hath given us, to keep it within the bounds of Moderation. And it may suffice to Natures vindication, that reason obligeth me to acknowledge, that her design in instituting our Passions, was in the general this; *that they might dispose and incite the Soul to affect and desire those things, which Nature by secret dictates teacheth to be good and profitable to her; and to persist in that desire: as the same commotion of the spirits that is requisite to produce them, doth dispose the parts of the Body also to those motions that serve to the execution of her will.* And hence doubtless it is, that they who are naturally most apt to be moved by passions, have this advantage above others of duller and grosser constitutions, that they may (if they will) taste more of the pleasures belonging to the Sensitive Soul: but then again they are likewise thereby more exposed to drink of the gall and wormwood of pain and remorse, when they know not how to regulate their passions, and when adverse Fortune invades them. I am confirmed then, that because man is constituted propense to Passions, he is not therefore the less perfect, but rather *the more capable of pleasure* from the right use of the

General Remedies

the good, things of this life: and by consequence, that Nature by making him *λων μαλεντην*, hath therein signalized both her *wisdom* and *indulgence*.

But had he not been more perfect, if it
 Art. 3. had pleased his Creator to endow him more-
 That we are prone over with such Excellency above all other
 to Errors, Animals, as might have secured him from
 not from committing Errors through the violent in-
 want of an omniscious stigation of his Passions, whenever they
 understanding. should incite him to desire and pursue things
 not really but only apparently good for
 him? Certainly no. For it is not only impious, but highly absurd, to imagine that God can be Author of our Errors, because he hath not given to us an Understanding *Omniscious*: for it is of the formal reason of a created intellect, that it be *finite*: and of a finite intellect, that it extend not it self to *all* things. But that Man should have a *Will* unconfined or extensible to all things, this indeed is convenient to his nature: and it is a transcendent *perfection* in him, that he can and doth act by his own will, that is *freely*; and so is, by a peculiar prerogative, Author of his own actions, and may deserve praise and reward for them. For no Man praiseth a *Watch*, or any other Self moving engine made by art, for performing the motions thereby designed;

signed ; because those motions necessarily result from the figure and construction of its *parts* : but the *Artist* himself deserves praise, because he framed the engine not by necessity or compulsion, but *freely*. So we by the same reason deserve the more by well-doing, that is by embracing truth, because we do it *voluntary* or by election ; than we should, if we could not but do it. When therefore we fall into Errors, occasioned by our Passions ; the defect lieth in our own act, or in the use of our *liberty*, not in our nature : for that is the same when we make an erroneous judgment of things represented to us, as it is when we make a right judgment. And although Almighty God might, if He had thought good, have given so great perspicacity to our Understanding, as that we could never have been deceived : yet by what right can we require that privilege from him ? True it is (I confess) that among us *Men*, if any hath power to hinder this or that evil, and yet doth not hinder it ; we accuse him as cause of it ; and justly too, because the power that Men have one over others, was instituted, and committed to them to that end, that they should use it to the restraining of others from evil. But there is not the same reason why we should

think

think **God** to be Author of our Errors, only because it was in His power to have prevented them, by making us superior to deception: for the power that **God** hath of right over all Men, is most *sovereign*, most *absolute*, most *free*. And therefore we are obliged to ascribe to His Divine Majesty, all possible praise and thanks for the good gifts He hath out of his infinite benignity been pleased to bestow upon us his Creatures: but we have no pretext of right to complain, because He hath not conferred upon us all things that we conceive he might.

Art. 4.
But from
our *ill use*
of that un-
derstand-
ing we
have, in
the con-
duct of
our de-
sires sug-
gested by
passions.

Besides, although the *intellect* of Man be not omniscious; yet is it not so narrow, so limited, as not to extend to the conduct of his Unlimited *Will*, in the Election of Good, and avoidance of Evil; and consequently to his exemption from *Error* by the violence of his Passions. For, *first*, by virtue of his Understanding, Man is capable of *Wisdom*, which is alone able to teach him how to subdue and govern all his Affections, and how to dispense them with such dexterity, as not only to make all the Evils they produce, easily tollerable, but even to reap internal satisfaction and joy from all. And *secondly*, it is evident from the very nature of our Passions, that they cannot

carry

carry us on to any actions whatsoever, but only by the *Desire* they excite in us: and therefore if we can but *direct* that desire to *right* objects, that is to things *really Good*; we may by that alone prevent our being deceived, that is our being carried to evil actions by violence of our Passions: but that *Right Reason* is of it self able so to direct our desire arising from passions, is manifest from the known Utility of *Moral Philosophy*, which prescribeth certain rules to that end. I will conclude then, that I commit Errors in

Art. 5.
That all
Errors to
which the
desires ex-
cited by
our Passi-
ons, ex-
pose us, a-
rise from
hence,
that we
do not
sufficient-
ly distin-
guish
things
that de-
pend in-
tirely up-
on our
selves,
from
those that
depend
upon o-
thers.

That I may therefore be henceforth better able to make use of my Understanding as I ought, in such occasions; it highly concerneth me to enquire in the next place, into the origin of that *Error*, to which the *Cupidity* accompanying our Passions, doth most frequently expose us: for, that being once known, will be the more easily avoidable. This *Error* then doth arise (if I mistake not) from hence; that we do not sufficiently distinguish those things that

de-

depend intirely upon our selves, from those that depend upon others, as to their events: it being a general rule, that *Desire* is always good, when grounded upon certain *Knowledge*; and on the contrary always evil, when founded upon some *error*. Now as to things that depend upon our selves alone, that is upon our Free-will; to know them to be good, is sufficient to assure us we cannot desire them too fervently: because to do good things that depend upon our selves, is to pursue *Virtue*, which cannot be too fervently desired, nor can the *event* of our desire of such things possibly be unhappy, because from the conscience that by desiring them we have rightly used the freedom of our will, we receive all the satisfaction we expected, But alass! the Error that is too commonly committed in such cases, lieth not in the over fervent, but in the *over cold* desire. And the best *remedy* against this *defect*, is to free the mind as much as is possible, from all other desires less profitable; and then to endeavour clearly to understand, and with due attention to examine the goodness of the thing that is represented as worthy to be desired.

As

As for the things that are altogether independent upon Us; however good they may be, yet we are never to desire them vehemently: not only because tis possible they may never arrive, and so vex and torment the mind so much the more bitterly, by how much the more eagerly they have been desired; but chiefly because by preoccupating our thoughts, they withdraw our study from other things whereof the acquisition depends upon our selves. And against these *vain* desires there are *two* general *Remedies*; whereof the first is true *Generosity*; the other, a firm belief of, and tranquil dependence upon *Providence Divine*. For, that noble and heroick habit of the mind, which is called *Generosity*, and which seems to comprehend all other *Virtues*; though it animateth Men to great and honorable enterprizes, doth yet at the same time restrain them from attempting things which they conceive themselves incapable to effect; inspiring *courage*, not temerity. Then by teaching, that nothing is either more worthy of, or more delightful to a spirit elevated by the love of *Virtue*, above the vulgar, than to do good to others; and in order thereunto, to prefer beneficence to self-interest: it makes us perfectly charitable, benign, affable,

Art. 6.
And that
they may
be pre-
vented by
two Gene-
ral Reme-
dies, viz.
Generosity.

and

and ready to oblige every one by good offices, when it is in our power so to do. Again, being inseparable from virtuous *Humility*, it makes us both to measure our own *Merits* by the impartial rule of right reason, and to know that we can have no just right to praise or reward, but from the genuin and laudable use of the freedom of our *Will*. And from these and other the like excellent effects of this divine *Virtue*, it is that the *Generous* attain to an absolute dominion over their exorbitant passions and desires. They conquer *Jealousie* and *Envie*, by considering, that nothing whereof the acquisition depends not wholly upon themselves, is really valuable enough to justifie their earnest desire of it. They exempt themselves from *Hatred* towards any, by esteeming all as worthy of love as themselves. They admit no *Fear*, by being duly conscious of their own innocency, and secure in the confidence of their own *Virtue*. They banish *Grief*, by remembering that while they conserve their *will* to do *good*, they can be deprived of nothing that is properly theirs. And *Anger* they exclude, because little esteeming whatsoever depends upon others, they never yield so much to their *Adversaries*, as to acknowledge themselves within the reach

teach of their injuries. It is not then without reason, that I fix upon *Generosity*, as one of the universal remedies against our inordinate Cupidities. And

As for the other, namely frequent reflection upon *Providence Divine*; this doubtless must likewise be of sovereign efficacy to preserve us from all distempers of mind. For, it establisheth us in a certain persuasion, that it is absolutely impossible that any thing should come to pass otherwise than this *Providence* hath from all eternity determined: and consequently, that *Fortune* is but a *Chimera*, hatch'd in the brain out of an Error of human understanding, and nourished by popular *superstition*. For, we cannot desire any thing, unless we first think the same to be some way or other *possible*: nor can we think those things to be possible, that depend not upon us, unless so far as we imagine them to depend upon *Fortune*, and that the like have happened in times past. But this opinion proceeds only from hence, that we *know not* all the Causes that concur to single Effects. For, when a thing that we have apprehended to depend upon *Fortune*, and so to be possible, succeeds not: that is a certain sign, that some one of the Causes necessary to make it succeed or come to pass,

Art. 7.
And frequent reflections upon *Providence Divine*.

N hath

hath been wanting; and consequently, that the same was absolutely impossible; as also that the like event, that is such a one to the production whereof the like necessary Cause was wanting, hath never come to pass. So that had we not been *ignorant* of that *deficient* Cause, we never had thought that event to be *possible*, nor by consequence ever *desired* it.

Art. 8.
Which utterly ex-
cludeth
Fortune,
but leav-
eth us at.
Liberty to
direct our
desires.

We are therefore utterly to renounce that vulgar absurdity, that there is in the World a certain Power called *Fortune*, that makes things to happen or not to happen as she pleaseth: and in the room thereof to establish this great verity, that all things are directed by *Divine Providence*, whose decree is so infallible and immutable, that excepting those things which the same decree hath left to depend upon our *Will*, we ought to think, that in respect of *Us*, nothing doth or can come to pass, that is not necessary, and in some measure fatal: so that we cannot without *error* desire any thing should come to pass otherwise than it doth. But forasmuch as our desires for the most part extend to things that depend neither wholly upon us, nor wholly upon others: therefore we ought in them to distinguish exactly what dependeth *intirely* upon our *selves*,

selves, that so we may extend our desires to *that* alone. And as for the rest; though we ought to look upon the success as fatal and immutable, lest we place our desire thereupon: yet ought we also seriously to weigh and consider the *reasons* that suggest more or less *hope*, that they may serve to direct our actions accordingly. For *reason* requires we should follow the more probable and safe way to our end: and when we have done so; whatever the *Event* be, we ought contentedly to acquiesce in this, that we have done what our *Understanding* judged to be *best*. And truly when we have learned thus to distinguish *Providence* *Divine* from *Fortune*, we shall easily acquire a habit of directing our desires in such a manner, that because the accomplishment of them depends upon our selves only, they may always afford us full satisfaction.

But do we not here intangle our selves in great difficulties, by endeavouring thus to reconcile this eternal Preordination of God, to the Liberty of our Will? we do, I confess; but conceive withal, that we may disentangle our selves again, by rememb- bring, that our *Understanding* is *finite*, but the *power* of God by which He hath foreknown all from eternity not only foreknown all

Art. 9.
How we
may expe-
dite our
selves from
the diffi-
culties
that seem
to make
the de-
cree of
Divine
Providence
irrecon-
cileable to
the liberty
of our will.

things that are or can possibly be, but also willed and preordained them so to be, is *infinite*: and then that it is enough for us, clearly and distinctly to know, that this infinite Power is essentially in God; but too much for us so to comprehend the same, as to see in what manner it leaveth the actions of Men undetermined and *free*. For of the *Liberty* or indifferency that is in us, we are all so conscious within our selves, that there is nothing we can comprehend more evidently, more perfectly. And it were absurd, because we cannot comprehend one thing which we know to be of its own nature *incomprehensible* to us; therefore to doubt of another which we do intimately comprehend, and by daily experience find to be in our selves.

Art. 10. Again, since we thus know most certainly, that all our *Errors* depend upon our *Will*; is it not wonderfully strange that we are ever deceived, when no Man is willing to be deceived? 'Tis so indeed; but nevertheless the Problem seems capable of solution by considering, that it is *one* thing to be willing to be deceived, and *another* to be willing to give *assent* to those things wherein it happens that error is found. And though there be no Man, who is expressly willing to be deceived: yet

yet there is scarcely any, who is not often willing to assent to those things wherein error is, unknown to him, contained: Yea it often falls out; that the very desire of attaining to truth, causeth those who do not rightly know by what way it is to be attained, to give judgment of things they do not clearly perceive, and so to err. So that the *summ* of all this perplex and intricate matter is this, that *Error ariseth from our assent to things whose truth or falsity, good or evil, we have not clearly and distinctly discerned.* For, since God cannot without impious absurdity be imagined to be Author of deceit, the faculty He hath given us of perceiving and discerning, cannot naturally tend to *falsity*: as neither can our faculty of assenting, that is our will, when it extends it self only to those things that are clearly perceived. Whence it follows, that to *direct our desires aright*, our main busines must be to employ our *Understanding* or faculty of discerning, strictly and attentively to examine and consider the *goodness* of the objects, before we determine our *Will* upon them: wherein doth chiefly consist the use of all *Moral Wisdom*, and whereupon great part of our temporal *Felicity* dependeth.

Art. 11.
 A third
 general
 Remedy a-
 gainst Er-
 ror occa-
 sioned by in-
 ordinate
 Passions,
 viz. Pre-
 meditation
 and Deli-
 beration.

But do not I here propose a lesson ver-
 ry hard to human frailty to learn? Is it
 not extremely difficult thus accurately
 and calmly to examine things, when the
 imagination is vehemently commoved by
 the object of some more violent passion,
 and the judgment strongly surprised? I
 acknowledge it to be *difficult* indeed:
 but this difficult hath its proper *Reme-
 dy*, namely *Premeditation* and *Deliberati-
 on*. I find in my self (and so do all
 Men, I believe) that the motions raised
 in my blood by the objects of my affec-
 tions, do so promptly follow upon the
 first impressions made by them in my brain,
 and from the mechanical disposition of
 the organs of my body, though my Soul
 contribute nothing toward their advance-
 ment, but continues indifferent; that all
 the wisdom I can call to my assistance
 is not sufficient to resist and arrest them.
 And others there are, I know, who be-
 ing naturally propense to the commotions
 of Joy, or of Cominiferation, or Ter-
 ror, or Anger; have not the power to
 refrain themselves frow swooning, or tears,
 or trembling, or heat of blood, when-
 ever their Phancy is vehemently assault-
 ed by objects apt to excite those Passions.
 Nay, as if all Mankind were equal-
 ly subject to the same defect, it is held for

a Maxim, that *the first motions of our passions are not in our power.* And yet notwithstanding, this so universal defect is not incurable by *Premeditation and care.* When therefore we first feel any such strong commotion of our blood, we ought to be premonished and to remember, that all things that offer themselves to the imagination, respect only the deception of the reasonable Soul, and to perswade her that the reasons which serve to recommend the object of her passion, are far more firm and considerable than in reality they are: and on the contrary, that those which serve to discommend it, are much weaker and less considerable than in truth they are. And when Passion comes at length to perswade us to do those things whose execution admits of any the least pause or delay: we must remember to abstain from giving judgment concerning them, much less assent to them, and to avert our cogitations to other things, until time and quiet have wholly composed the commotion in our blood. Finally, when heat of passion inciteth us to actions that allow little or no time for counsel or deliberation; in this case we are to convert our will chiefly upon following those *reasons that are contrary to what that pas-*

sion suggesteth, although they appear less valid. So when an Enemy invades us unexpectedly, that sudden occasion permits us not to take time for deliberation whether of the three is best, to *resist*, to *submit*, or to *fly*. Here therefore, when we feel our selves surprised with *fear*; we should endeavour to avert our thoughts from the consideration of the danger, and fix them upon the reasons for which there is greater security and honour in resistance than in flight: and on the contrary, when we perceive our selves to be by *anger* and desire of *revenge* provoked to rush furiously upon him who assaults us; we must remember to think, that it is great imprudence to precipitate ones self into manifest danger, when safety may be obtained without infamy: and where we are *inferior* to the Aggressor in point of strength, there we are likewise to consider, that it is better to retreat honourably, or to consent to terms of submission, than like a wild beast to expose our selves to certain death. This therefore I ought to prescribe to my self, as a *Third Pancreston* or *Universal Antitode* against the incommodeities impendent from Passions; viz. to give my self time for deliberation, where the occasion will allow it: and where

where it will not, there to convert my thoughts chiefly upon the reasons that contradict the suggestions of my passion: and always to remember that the reasons that offer themselves to recommend the object of my passion, are not really so valid and considerable, as my imagination represents them to be. Nor doth this counsel seem difficult to be put in practice, especially by considerate Men and such who are wont to make serious reflections upon their actions.

But what need I thus perplex my thoughts in searching for Medicins to mitigate the violence of Passions, when there is one singular Remedy infallibly sufficient to secure us from all the Evils they can possibly occasion, and that is the *constant exercise of Virtue*? For, seeing that the internal commotions of the *Reasonable Soul* touch us more neerly, and by consequence are much more prevalent over us, than the affections of the *Sensitive*, which though different from, are yet many times conjoyned with them: most certain it is, that all the tumults raised in the *Sensitive*, have no power to perturb the tranquillity of her Superior, the *Rational*, provided she have reason to be in peace and content within her self; but serve rather to

Art. 12.
A fourth
universal
Remedy,
viz. the
constant
exercise of
Virtue.

to augment her Joy, by giving her occasions to know and delight in her own ~~pefection~~, as often as she finds her self much above any the least discomposure or disturbance from them. And that she may be thus *content* within her self, she need do no more but intirely addiet her self to the *love* and *pursuit* of *Virtue*. For, whoever hath so lived, that his conscience cannot accuse him of ever neglecting to do those things which he judged to be best (which is exactly to follow the conduct of *Virtue*) this Man doth from thence receive that *intellectual joy* and satisfaction, which is of such sovereign power to make him happy, that the most violent commotions of his affections can never be of force enough to perturb the tranquillity of his Soul; and which being the *Summum Bonum* of human life, is not to be attained (as *Seneca* from his oracle *Epicurus* most judiciously observes, *Epist. 23.*) *nisi ex bona conscientia, ex honestis consiliis, ex rectis actionibus, ex contemptu fortitorum, ex placido vitae ac continuo tenore unam presentis viam*. Nor is there indeed any other internal satisfaction or joy belonging to the Rational Soul, but what she thus formeth to her self out of her self; and what can therefore be no more interrupted,

terrupted, than she can be destroyed: the assurance whereof made the same *Seneca* say (Epist. 27.) *Sola virtus præstat gaudium perpetuum, securum: etiam si quid obstat, nubium modo intervenit, que infra feruntur, nec unquam diem vincunt.*

And these, my dear friend, are some of those Philosophical considerations upon which I sometimes reflect (as I lately told you) as Universal and Efficacious Remedies against vain desires suggested by our Passions, and the various Evils to which they usually expose us. Which now you have with so great patience heard; 'tis fit I should gratefully resign you to a more profitable conversation with your own thoughts, which I know to be for the most part employed in the study of things noble and worthy your excellent wit. But first, lest you should think I do it somewhat abruptly, and by omitting to prescribe also *Special Preservatives* proper to the excesses of each particular Affection, end this discourse before I have finished it: suffer me in a word to advertise you, that I make this omission, not from incogitancy, nor out of weariness, but only for your greater benefit. For, being of opinion, that the *Ethicks of Epicurus* are (after Holy writ) the best *Dispensatory* I have hitherto read, of

Art. 13.
The study
of Epicu-
rus's Mo-
rals re-
commend-
ed.

of Natural *Medicines* for all distempers incident to the mind of Man : I conceive, I may do you better service by recommending that Book to your serious perusal, than by writing less accurately of the same most weighty argument. This therefore I now do ; not doubting but that in the *Morals* of that grave and profound Philosopher, you will find as good *Precepts* for the moderating your Passions, as *Human wisdom* can give.



FINIS.

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